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GOVERNOR



HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail No.:

Agency Interest No. 1556
Activity No.: PER20080007

Ms. Karen Kay
Global Manufacturing Leader
ANGUS Chemical Company
P.O. Box 1325
Sterlington, LA 71280

RE: Part 70 Operating Permit Renewal/Modification, Nitroparaffins Derivatives Plant and Related Units, ANGUS Chemical Company, Sterlington, Ouachita Parish, Louisiana.

Dear Ms. Kay:

This is to inform you that the permit renewal/modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the _____ of _____, 2014, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

Done this _____ day of _____, 2009.

Permit No.: 2011-V5

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary

CSN/CMM
cc: US EPA Region VI

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

NITROPARAFFINS DERIVATIVES PLANT AND RELATED UNITS
AGENCY INTEREST NO.: 1556
ANGUS CHEMICAL COMPANY
STERLINGTON, OUACHITA PARISH, LOUISIANA

I. Background

ANGUS Chemical Company owns and operates a Nitroparaffins Basics (NPB) plant and Nitroparaffins Derivatives (NPD) Plant with related units, which include the Crystals Unit, the Hydrogen Unit, the Isopropylhydroxylamine (IPHA) Unit, and part of the Shipping Department, located in Sterlington, Louisiana. The NPD plant currently operates under Permit No. 2011-V4, issued January 31, 2008.

II. Origin

ANGUS Chemical Company submitted an application and Emission Inventory Questionnaire (EIQ) dated May 29, 2008, requesting a Part 70 permit renewal/modification.

III. Description

The primary function of the Nitroparaffins Derivatives (NPD) Plant is to manufacture nitro alcohols, amino alcohols, and other amines from the four basic Nitroparaffins produced in the Nitroparaffins Basics (NPB) Plant. In addition to Nitro Alcohols and Amino Alcohols, ANGUS also manufactures several other Amines using the same equipment as the other Nitroparaffins Derivatives. These include Oxazolidines (Amine CS-1246, Amine CS-1135, and ZOLDINE ZT-55/65), hydroxylamines, and amine P-1487. The Oxazolidines are made by reacting one of the amino alcohols with formaldehyde. Isopropylhydroxylamine (IPHA), the primary hydroxylamine manufactured, is made by reacting 2-nitropropane and hydrogen. Amine P-1487 is made by reacting 1-nitropropane, formaldehyde, and morpholine.

The Hydrogen Unit, which supplies the hydrogen used as a feedstock in the NPD Plant, is also included in this Title V permit.

Products are stored in tanks and shipped in drums, totes, tank trucks, and tank cars.

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Nitro Alcohols

The basic Nitroparaffins are converted to nitro alcohols through a reaction with a formaldehyde solution in the presence of an organic catalyst. There are four nitro alcohol reactors in the NPD Plant: DR-01, DR-03, DR-05, and DR-09. Nitro alcohols are created using a continuous or batch reaction, and are produced both as a finished product and as a raw material for the amino alcohol process.

Amino Alcohols

Amino alcohols production entails combining nitro-alcohols and hydrogen in the presence of a catalyst in high pressure vessels known as autoclaves. There are five amino alcohol autoclaves in the NPD Plant: DR-02A, DR-02B, DR-04A, DR-04B, and DR-07. The in-house Hydrogen Unit provides all the hydrogen used in the reaction. Methanol is used in conjunction with the hydrogen to aid in the chemical reaction. The amino alcohol and methanol solution is sent to distillation where the amino alcohol product is separated from the methanol. The separated methanol is sent to the methanol recovery system where it is purified and recycled into the process. Purged Hydrogen from the autoclaves is sent to the Powerhouse to be burned as a supplemental fuel. Most residual hydrogen is also vented to the Powerhouse at the end of each batch reaction, with the balance vented to the flare.

Methanol Recovery System

Methanol is recovered by injecting sulfuric acid into the crude methanol streams as it is pumped from the crude tanks to an intermediate storage tank. The acid converts the amines to amine-sulfates. The amine sulfate stream is then fed to a distillation column, which removes clean "recovered" methanol overhead, and leaves water and amine-sulfates in the bottoms stream. The bottoms stream is treated at the ANGUS Wastewater Treatment Facility. The entire process is continuous.

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Nitroparaffins Crystals Unit

Crystallization of the liquid amino alcohol to a solid amino crystal occurs in either the Ultrapure or Technical grade crystallization lines located in the NPC Unit. In the Tech-grade facility, the amino alcohol solution is concentrated under a vacuum until a thick slurry is formed. In the Ultra-Pure facility, the amino-alcohol solution is crystallized under atmospheric conditions while ramping down the temperature until a thick slurry is formed. In both facilities, solids are separated by a centrifuge, dried, conveyed to a hopper, and packaged. Liquid from the centrifuge is further processed in the mother liquor recovery process. A condenser controls the dryer. The extraction solvent used is methanol, butanol, or isopropyl alcohol. Methanol or butanol is recovered and stored for reuse. Spent isopropyl alcohol is stored and sent off-site as a waste alcohol.

Hydrogen Unit

Hydrogen is produced using the steam methane reforming process. Natural gas is desulfurized using an adsorption catalyst that removes sulfur contaminants. The gas is passed through a steam driven heat exchanger prior to entering the reformer. In the reformer, an endothermic reaction occurs converting the steam and methane into hydrogen, carbon monoxide (CO), and carbon dioxide (CO₂). The reformed gases are passed over another catalyst which converts the majority of CO to CO₂. A fraction of the remaining steam is "shifted" into CO₂ and additional hydrogen.

The resulting synthesis gas is cooled, condensing the remaining steam, to produce the dry synthesis gas. The dry synthesis gases then enter a pressure swing adsorption (PSA) unit, which separates the product hydrogen gas from the PSA off-gases (unreacted methane, CO₂, CO, hydrogen, and nitrogen). The product hydrogen is stored in vessels prior to use. The PSA off-gasses are recovered and used as a fuel in the reformer along with supplementary natural gas fuel.

Isopropylhydroxylamine (IPHA) Unit

IPHA is produced by reacting 2-nitropropane and hydrogen. A catalyst is used to promote the reaction. The reaction produces IPHA, water, and traces of IPA (isopropylamine), which are transferred from the reactor (DR-10) to an intermediate

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vessel for catalyst removal and dilution to the required concentration for shipment. The catalyst is removed by filtration. The recovered catalyst is returned to the catalyst manufacturer. The filtered product is diluted to approximately 16 weight percent with additional water. The blended material is transferred to a storage tank for shipment. The IPHA solution can be shipped in bulk, drums, and totes.

The proposed modifications to the facility are as follows:

- Incorporate changes allowed by the following Change of Tank Services:
 - Change of Tank Services for Emission Point No. XT-10, issued June 7, 2007.
 - Change of Tank Services for Emission Point No. DT-35, issued August 15, 2008.
 - Change of Tank Services for Emission Point Nos. DF-72 and DT-30B, issued August 15, 2008.
- Delete the Blend Storage Tank, Emission Point No. XT-03, since this emission point is now permitted in the Nitroparaffins Basics Title V Permit.
- Delete Ion Exchanger Activities, Emission Point No. IEA, as an emission point and reclassify it as a GC XVII activity. The Ion Exchanger Activities were permitted as a GC XVII activity until it was discovered that sulfuric acid emissions were greater than the MER. ANGUS has replaced high concentration sulfuric acid used for this activity with lower concentration thus lowering potential emissions of sulfuric acid below the MER.
- Renew the Title V Permit.

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	9.71	9.71	-
SO ₂	0.29	0.29	-
NO _x	39.39	39.39	-
CO	18.46	18.46	-
VOC*	111.90	106.61	-5.29
Hydrogen	48.69	48.69	-

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***VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

Pollutant	Before	After	Change
2-Nitropropane	0.34	0.34	-
Formaldehyde	1.93	1.87	-0.06
Methanol	17.75	16.07	-1.68
n-Butyl Alcohol	10.08	10.08	-
Triethylamine	0.95	0.95	-
Total	31.05	29.31	-1.74
Other VOC	80.85	77.30	-3.55

NON-VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Ammonia	0.13	0.13	-
Chlorine	0.06	0.06	-
Sulfuric Acid	1.05	<0.01	-1.04
Total Non-VOC TAPs	1.24	0.20	-1.04

IV. Type of Review

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS), and NESHAP. Prevention of Significant Deterioration does not apply.

This facility is a major source of Toxic Air Pollutants (TAPs) for the entire facility and a major source of individual TAPs as regulated pursuant to LAC 33:III.Chapter 51. Air Toxics Compliance Plan No. 92013 was approved on December 16, 1994.

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V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on XXXXXXXX; and in *The News-Star*, Monroe, on XXXXXX. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on XXXXXXXXXXXX. The draft permit was also submitted to US EPA Region VI on XXXXX (e-mailed). All comments will be considered prior to a final permit decision.

VII. Effects on Ambient Air

Dispersion Model(s) Used: ISCST3

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Air Quality Standard (NAAQS)
2-nitropropane	Annual	8.50 µg/m ³	20 µg/m ³
Acetaldehyde	8 hour	1,794 µg/m ³	4,290 µg/m ³
Acetonitrile	8 hour	154 µg/m ³	940 µg/m ³
Formaldehyde	Annual	5.09 µg/m ³	7.6 µg/m ³
Methanol	8 hour	2,474 µg/m ³	6,240 µg/m ³
N-butyl alcohol	8 hour	782 µg/m ³	3,620 µg/m ³
Nitric acid	8 hour	36 µg/m ³	200 µg/m ³

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VIII. General Condition XVII Activities

General Condition XVII Activities emissions from Nitroparaffins Derivatives Plant are as follows:

Activity ID No.	Activity	Frequency of Activity
01-GCXVII	CG11 Mother Liquor Centrifuge Fugitive Emissions	150,171 rinses/yr
02-GCXVII	Clearing Piping and Associated Equipment	730 events/yr
03-GCXVII	Control Equipment Maintenance	230 events/yr
04-GCXVII	Equipment Maintenance	2,190 events/yr
05-GCXVII	Filter Change-out	20,290 filters/yr
06-GCXVII	Instrument Maintenance	2,190 events/yr
07-GCXVII	Ion Exchanger Activities	1,196 events/yr
08-GCXVII	Sampling	70,810 samples/yr
09-GCXVII	Tank Gauging	36 times/year/tank
10-GCXVII	Vessel Preparation	5,537 events/yr
11-GCXVII	Waste Water Collection System	73,000 gallons/yr
12-GCXVII	NPD Flare Maintenance, Startup, and Shutdown	18 events/yr

Activity ID No.	Total Annual Emissions					
	PM ₁₀	SO ₂	NO _x	CO	VOC	Other
01-GCXVII	-	-	-	-	2.54	-
02-GCXVII	-	-	-	-	0.69	-
03-GCXVII	-	-	-	-	<0.01	-
04-GCXVII	-	-	-	-	0.29	-
05-GCXVII	-	-	-	-	0.26	-
06-GCXVII	-	-	-	-	0.10	-
07-GCXVII	-	-	-	-	4.17	0.01 ¹
08-GCXVII	-	-	-	-	0.34	-
09-GCXVII	-	-	-	-	<0.01	-
10-GCXVII	-	-	-	-	3.70	0.02 ¹
11-GCXVII	-	-	-	-	0.65	-

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Activity ID No.	Total Annual Emissions					
	PM ₁₀	SO ₂	NO _x	CO	VOC	Other
12-CGXVII	-	-	-	-	3.41	0.30 ²

¹Sulfuric Acid

²Hydrogen

IX. Insignificant Activities

ID No.:	Description	Max Rate or Tank Capacity	Citation
DF-03	30% Caustic Tank	714 gal.	LAC 33:III.501.5.B.40
DF-54	Raney Nickel Catalyst Wash Tank	92 gal.	LAC 33:III.501.5.A.2
DF-65	Caustic Measuring Pot	33 gal.	LAC 33:III.501.5.A.2
DF-77	Morpholine Drop Pot	24 gal.	LAC 33:III.501.5.A.2
DF-91	Tempered Water Tank	432 gal.	LAC 33:III.501.5.A.3
DF-94	Catalyst Prep Tank	92 gal.	LAC 33:III.501.5.A.2
DF-96	Catalyst Receiver Tank	184 gal.	LAC 33:III.501.5.A.2
DG-57	Pneumatic Conveyor	5,000 lb/hr	LAC 33:III.501.5.A.11
DT-08B	50% Caustic Storage Tank	11,656 gal.	LAC 33:III.501.5.B.40
DT-53	Ammonium Hydroxide Tote	450 gal.	LAC 33:III.501.5.A.3
DA-01	Catalyst Drumming	100 gal/hr	LAC 33:III.501.5.A.11

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X. Applicable Louisiana and Federal Air Quality Requirements

		LAC 33.III Chapter						NSPS 40 CFR 60						40 CFR 61						NESHAP 40 CFR 63						40 CFR										
Emission Points	Facility Wide	5'	9'	11'	13'	15'	21'	29*	51*	56'	59*	A	Db/c	G	Kb	NNN	A	M	V	FF	A	F	G	H	Q	Y	EEEE	FFFF	ZZZZ	64	68	82				
BT-108																														1	1	1				
CD-10																															3	3	3			
CE-01																																3	3	3		
CE-02																																	3	3	3	
CE-03																																		3	3	3
CE-05																																		1	1	1
CF-06																																		3	3	3
CF-10																																		3	3	3
CF-13																																		3	3	3
CF-16																																		3	3	3
CG-01																																		3	3	3
CG-12																																		3	3	3
CG-23																																		3	3	3
CG-32																																		1	1	1
CJ-59																																		3	3	3
CK-01																																		1	1	1
CR-01																																		3	3	3

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Emission Points	5 ¹	9	11	13	15	21	29*	51*	56	59*	A	D/b/c	G	K _b	NNN	A	M	V	FF	A	F	G	H	Q	Y	EEEE	FFFF	ZZZZ	64	68	82											
CR-02							2		1																																	
CT-02							3		1																																	
CT-04							1		1																																	
CT-11							1		1																																	
CT-14							3		1																																	
E-7C							3		1																																	
G-66							3		1																																	
G-67							3		1																																	
G-79							3		1																																	
G-81							3		1																																	
HF-14							3		1																																	
HT-04							1		1																																	
Hydrogen Unit																																										
UF-06										2		1																														
UG-11									1		1	3																														
UR-01									1		1	3																														
DF-95											3		1																													
DF-97											3		1																													
DR-10												2																														

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DT-35							3	1																					1		
XT-36							3	1																					1		
XT-37							3																						1		

Nitroparaffins Derivatives Plant

CT-07		3																											3		
CT-09		3																											3		
CT-22		1		1																									1		
CW-3		1																											1		
DC-57		1		1																									1		
DE-03			1																										3		
DE-04			1																										1		
DE-05			1																										3		
DE-09			1																										1		
DE-13			1																										1		
DE-14			1																										1		
DE-15			1																										1		
DE-16			1																										1		
DE-20			1																										3		
DE-26			1			3																						1			
DF-06A			3			1																						1			

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DF-06B							.3		1																																																							
DF-07							3		1																																																							
DF-12							3.		1																																																							
DF-17A							3		1																																																							
DF-17B							3		1																																																							
DF-21							3		1																																																							
DF-25							1		1																																																							
DF-27							3		1																																																							
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DF-30							3		1																																																							
DF-31							3		1																																																							
DF-36							3		1																																																							
DF-48A							3		1																																																							
DF-48B							3		1																																																							
DF-56A							3		1																																																							
DF-56B							3		1																																																							
DF-71							3																																																									
DF-72							3																																																									
DF-73							3																																																									

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DF-74																															
DF-78A																															
DF-78B																															
DF-85																															
DF-86																															
DF-87																															
DF-89A																															
DF-89B																															
DF-90A																															
DF-90B																															
DH-01	1								2																						
DH-03	1																														
DK-01		3																													
DR-01		2																													
DR-02A		2																													
DR-02B		2																													
DR-03		2																													
DR-04A		2																													
DR-04B		2																													
DR-05		1																													

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DR-06							2		1																								
DR-07							2		1																								
DR-09							2		1																								
DT-01							3		1											3													
DT-02B							1		1											3													
DT-03							3													3													
DT-05							3													3													
DT-06							1		1											3													
DT-07							3		1											3													
DT-08A							1		1											3													
DT-08C							1		1											3													
DT-09A							1		1											3													
DT-09B							1		1											3													
DT-10							1													3													
DT-11							1		1											3													
DT-12							3		1											3													
DT-16							3		1											3													
DT-17							3		1											3													
DT-18							3		1											3													
DT-19							3		1											3													

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X. Applicable Louisiana and Federal Air Quality Requirements

	LAC 33.III Chapter										NPSR 40 CFR 60					40 CFR 61					NESIAP 40 CFR 63					40 CFR					
Emission Points	5'	9	11	13	15	21	29*	51*	56	59*	A	Db/c	G	Kb	NNN	A	M	V	FF	A	F	G	H	Q	Y	EEEE	FFFF	ZZZZ	64	68	82
DT-20											3																		3		
DT-23											1																		1		
DT-24											3																		3		
DT-25											3																		1		
DT-27											3																		3		
DT-28											3																		3		
DT-29											3																		3		
DT-30A											1																		3		
DT-30B											3																		3		
DT-31											3																		3		
DT-32											1																		3		
DT-36A											1																		1		
DT-36B											1																		1		
DT-55											3																		3		
F-7											3																		1		
F-7D											3																		1		
F-42											3																		3		
G-44N											3																		3		
G-44S											3																		3		
HT-08											3																		3		

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

NITROPARAFFINS DERIVATIVES PLANT AND RELATED UNITS
 AGENCY INTEREST NO.: 1556
 ANGUS CHEMICAL COMPANY
 STERLINGTON, OUACHITA PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

	LAC 33:III Chapter												NSPS 40 CFR 60												40 CFR 61												40 CFR				
Emission Points	5'	9	11	13	15	21	29*	51*	56	59*	A	D/b/c	G	Kb	NNN	A	M	V	FF	A	F	G	H	Q	Y	EEEE	FFFF	ZZZZ	64	68	82										
HT-09																																									
IEA																																									
RL-01																																									
XK-01																																									
XK-02																																									
XK-02B																																									
XT-04B																																									
	Shipping Department																																								
DE-19																																									
DT-13																																									
DT-14																																									
F-7S																																									
WL-01																																									
XT-01																																									
XT-02A																																									
XT-02B																																									
XT-09A																																									
XT-09B																																									
XT-09C																																									
XT-10																																									
XT-113																																									

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AGENCY INTEREST NO.: 1556

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STERLINGTON, OUACHITA PARISH, LOUISIANA

X. Applicable Louisiana and Federal Air Quality Requirements

	LAC 33:III Chapter										NSPS 40 CFR 60										40 CFR 61										NESHAP 40 CFR 63										40 CFR									
	5 ¹	9	11	13	15	21	29*	51*	56	59*	A	Db/c	G	Kb	NNN	A	M	V	FF	A	F	G	H	Q	Y	EEEE	FFFF	zzzz	64	68	82																			
XT-115																																																		
XT-133																																																		
XT-134																																																		
XT-14																																																		
XT-15																																																		
XT-17																																																		

* The regulations indicated above are State Only regulations.

¹ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

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KEY TO MATRIX

- 1 -The regulations have applicable requirements which apply to this particular emission source.
40 The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
Facility	40 CFR 63.100 HON Subpart F, National Emission Standards for Organic Hazardous Air Pollutants From SOCMF Facilities	DOES NOT APPLY. Units do not manufacture as a primary product one or more of the chemicals listed per 40 CFR 63.100(b)(1)(i) or (b)(1)(ii).	Facility is subject to 40 CFR 63, Subpart FFFF (MON).
	40 CFR 63.110 HON Subpart G, National Emission Standards for Organic Hazardous Air Pollutants From the SOCMF for Process Vents, Storage Vessels, Transfer Operations, and Wastewater	DOES NOT APPLY. Process vents, storage vessels, wastewater streams, transfer racks, and/or in-process equipment are not subject to Subpart F of Part 63.	
		Crystals Unit	
BT-108 Waste Alcohol Tank	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.)	Tank is 9,223 gallons.
CD-10 Centrifuge	LAC 33:III.2115.H.1.c Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H1.c or d.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Group 1 or Group 2 Batch Process Vent.	

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
CE-01 Butanol Column System	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.
CE-02 Air Scrubber System	LAC 33:III.5107-STATE ONLY Comprehensive TAP Emission Control Program	NON-APPLICABILITY DETERMINATION MADE. This source does not emit a Class I, II, and/or III TAP.	
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.
CE-03 Butanol Stripper System	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.
CF-06 Mother Liquor Receiver	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.)	Tank volume is 864 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
CF-06 Mother Liquor Receiver (continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 864 gallons.
CF-10 Crystallizer Feed Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.)	Tank volume is 1,249 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 1,249 gallons.
CF-13 Extraction Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.)	Tank volume is 306 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
CF-13 Extraction Tank (continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 306 gallons.
CF-16 Surge Tank System	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.)	
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank meets the definition of a process tank. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.
CG-01 TA Crystallizer System	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.
CG-12 Mother Liquor Evaporator System	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
CG-23 Flame Arrestor for CF-13, CF-14, and CF-15	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.)	CF-13, CF-14, and CF-15 tanks are all less than 10,000 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	CF-13, CF-14, and CF-15 tanks are all less than 10,000 gallons.
CJ-59 Delumper Pneumatic Dust Filter System	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.
CK-01 Loading/Unloading (Tank Trucks)	LAC 33.III.2107 Volatile Organic Compounds – Loading	NON-APPLICABILITY DETERMINATION MADE. Loading facilities for VOCs having a true vapor pressure at loading conditions less than 1.5 psia or less than 20,000 gallons/day averaged over any 30-day period are not subject to the control and monitoring requirements of Section 2107.	Maximum true vapor pressure of VOC at loading conditions is less than 1.5 psia.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
CR-01 Crystallizer	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.
CR-02 Crystallizer.	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
CT-02 TA Solution Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.). Tank was not constructed, reconstructed, or modified since July 23, 1984.	Storage vessel constructed before July 23, 1984.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 11,571 gallons.
CT-04 Butanol Tank	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.). Tank was not constructed, reconstructed, or modified since July 23, 1984.	Storage vessel constructed before July 23, 1984.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 11,571 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
CT-11 Mother Liquor Receiver	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 5,052 gallons.
CT-14 TA Solution Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	DOES NOT APPLY. The maximum true vapor pressure of the stored contents, at storage conditions, is <1.5 psia. (<19,813 gal.).	Maximum true vapor pressure of stored contents is <1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 9,042 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, vessel is a Bottoms Receiver <10,000 gallons.	Tank volume is 9,042 gallons.
F-7C Crystals Fugitives	LAC 33:III.2121 Fugitive Emission Control	NON-APPLICABILITY DETERMINATION MADE. This unit is not an affected facility listed in LAC 33:III2121.A.	

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
F-7C Crystals Fugitives (Continued)	Louisiana MACT Determination for NON-HON Equipment Leaks	NON-APPLICABILITY DETERMINATION MADE. Class III TAP(s) emitted only; must meet AAS; No MACT requirements.	
G-66 Wet Butanol Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 8,725 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 8,725 gallons.
G-67 Butanol Extract Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 10,625 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
G-67 Butanol Extract Tank (Continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 10,625 gallons.
G-79 Water Phase Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 8,161 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 8,161 gallons.
G-81 NPC Waste Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 6,392 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
G-81 NPC Waste Tank (Continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 6,392 gallons.
HF-14 CE-03 Condensed Overheads Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 1,028 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 1,028 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
HT-04 TA-60 Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Vessel is used in several different batch processes. The vessel is vented to the atmosphere only when the process does not involve volatile organic compounds having a maximum true vapor pressure of 1.5 psia or greater at storage conditions.	The maximum true vapor pressure of the tank contents, at storage conditions, is less than 1.5 psia when venting directly to the atmosphere. If the maximum true vapor pressure of stored contents is greater than 1.5 psia, this tank is vented to a vapor recovery device (Condenser, Emission Point CE-05) with a minimum control efficiency of 95%. (LAC 33:III.2103.E)
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 4,245 gallons.	

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ID No:	Requirement	Compliance Method/Provision	Notes
HT-04 TA-60 Storage Tank (Continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 4,245 gallons.
		Hydrogen Unit	
UF-06 Deaerator Vent	LAC 33.III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs of VOC/24-hr. period.	Exempt per LAC 33.III.2115.H.1.c or d.
UG-11 Hydrogen Plant Flare	LAC 33.III.1503.C Emission Standard for Sulfur Dioxide	DOES NOT APPLY. Source emits less than 5 tons per year of sulfur dioxide.	
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.
UR-01 Steam Gas Reformer Heater	LAC 33.III.1503.C Emission Standard for Sulfur Dioxide	DOES NOT APPLY. Source emits less than 5 tons per year of sulfur dioxide.	
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Continuous Process Vent or Batch Process Vent.	Vent does not contain organic HAPs; therefore, no controls required.

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ID No:	Requirement	Compliance Method/Provision	Notes
Isopropylhydroxylamine (IPHA) Unit			
DF-95 IPHA Dilution Tank	LAC 33:III:2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE: The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 4,000 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 4,000 gallons.
DF-97 IPHA Blend Tank	LAC 33:III:2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE: The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 8,226 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 8,226 gallons.

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DR-10 IPHA Reactor	LAC 33.III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. Of VOC/24-hr. period.	Exempt per LAC 33.III.2115.H.1.c or d.
DT-35 IPHA Storage Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is < 1.5 psia at storage conditions.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY Tank capacity/vapor pressure >19,813 gal., <39,990 gal. and vapor pressure <2.2 psia.	Tank volume is 21,152 gallons. Vapor Pressure is <2.2 psia.
XT-36 IPHA Storage Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is < 1.5 psia at storage conditions.

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XT-36 IPHA Storage Tank (Continued)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >39,990 gal. and vapor pressure <0.5 psia.	Tank volume is 103,638 gallons. Maximum true Vapor Pressure is <0.5 psia.
XT-37 Oxazolidine Storage Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is < 1.5 psia at storage conditions.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >39,990 gal. and vapor pressure <0.5 psia.	Tank volume is 103,638 gallons. Maximum true Vapor Pressure is <0.5 psia.
Nitroparaffins Derivatives Plant			
CT-07 Hold Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is < 1.5 psia at storage conditions.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,918 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
CT-07 Hold Tank (Continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAP's only as impurities, no controls required.	Tank volume is 2,918 gallons.
CT-09 Hold Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is < 1.5 psia at storage conditions.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,918 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAP's only as impurities, no controls required.	Tank volume is 2,918 gallons.
CT-22 Methanol Tank	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 8,800 gallons.
CW-3 Cooling Tower 3	40 CFR 63.400 NESHAP Subpart Q, Process Cooling Towers	NON-APPLICABILITY DETERMINATION MADE. Chromium-based water treatment chemicals are not utilized.	
DC-57 Condenser for DR-05 and DT-18	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	

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ID No:	Requirement	Compliance Method/Provision	Notes
DE-03 AMP Refining Column System	40 CFR 63.2430 NESHPAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of a Continuous Process vent, vent contains <0.005 wt% of HAP, no controls required.	Vent contains < 50 ppm of HAPs.
DE-05 General Purpose Column System	40 CFR 63.2430 NESHPAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of a Continuous Process vent, vent contains <0.005 wt% of HAP, no controls required.	Vent contains < 50 ppm of HAPs.
DE-20 Vent Scrubber for Amine Check Tanks	40 CFR 63.2430 NESHPAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tanks venting to this control device do not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tanks controlled by this scrubber are each <10,000 gallons.
DE-26 NPD Flare System	LAC 33:III.1503.C Emission Standard for Sulfur Dioxide	DOES NOT APPLY. Source emits less than 5 tons per year of sulfur dioxide.	
DF-06A GA Autoclave Settling Tank (Vents to DE-26)	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	
DF-06B GA Autoclave Settling Tank (Vents to DE-26)	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-07 Spent Catalyst Tank (Vents to DE-26)	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	
DF-12 Nitro Alcohol Transfer Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 1,175 gallons.
40 CFR 63.2430		DOES NOT APPLY. Source meets the definition of a Process Tank, but Vent does not meet the definition of a Group 1 or Group 2 batch process vent.	Vent contains >50 ppm of HAP on a dry basis but <200 lbs/yr of HAP emissions.

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-17A AMP Check Tank (Tank vents to DE-20)	LAC 33:III.2103 Storage of Volatile Organic Compounds 40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia. DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Maximum true vapor pressure of stored contents is less than 1.5 psia. Tank volume is 1,470 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 1,470 gallons.
DF-17B AMP Check Tank (Tank vents to DE-20)	LAC 33:III.2103 Storage of Volatile Organic Compounds 40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia. DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Maximum true vapor pressure of stored contents is less than 1.5 psia. Tank volume is 1,470 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 1,470 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-21 Amino/Nitro Check Tank (Tank vents to DE-20)	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 1,088 gallons.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 1,088 gallons.
DF-25 Biocide Check Tank (Tank vents to DE-20)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,080 gallons.
DF-27 AMP Intermediate Receiver Tank (Tank vents to DE-20)	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 1,061 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-27 AMP Intermediate Receiver Tank (Tank vents to DE-20) (Continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 1,061 gallons.
DF-28 Biocide Check Tank (Tank vents to DE-20)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,080 gallons.
DF-29 Biocide Check Tank (Tank vents to DE-20)	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
DF-30 Recovery Still Receiver Tank (Tank vents to DE-20)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 2,080 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 2,080 gallons.
	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-30 Recovery Still Receiver Tank (Tank vents to DE-20) (Continued)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels 40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.). DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 2,080 gallons. Tank volume is 2,080 gallons.
DF-31 Recovery Still Receiver Tank (Tank vents to DE-20)	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia. DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Maximum true vapor pressure of stored contents is less than 1.5 psia. Tank volume is 2,080 gallons.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels 40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 2,080 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-36 AMP Check Tank (Vents to DE-20)	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 4,175 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 4,175 gallons.
DF-48A TA Settling Tank (Vents to DE-26)	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	
DF-48B TA Settling Tank (Vents to DE-26)	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	
DF-56A AMP Settling Tank (Vents to DE-26)	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	
DF-56B AMP Settling Tank (Vents to DE-26)	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-71 Amino Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 9,088 gallons.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 9,088 gallons.
DF-72 ZI-55/Morpholine Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 7,051 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-73 Evaporator Charge Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 5,056 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Source meets the definition of a Process Tank, but Vent does not meet the definition of a Group 1 or Group 2 batch process vent	Vent contains >50 ppm of HAP on a dry basis but <200 lbs/yr of HAP emissions.
DF-74 Falling Film Evaporator Separator System	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of a Group 1 or Group 2 batch process vent	Vent contains >50 ppm of HAP on a dry basis but <200 lbs/yr of HAP emissions.
DF-78A AMP Autoclave Catalyst Settling Tank (Vents to DE-26)	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	
DF-78B AMP Autoclave Catalyst Settling Tank (Vents to DE-26)	LAC 33:III.2103.A Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage vessels."	

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ID No:	Requirement	Compliance Method/Provision	Notes
DF-85 AMP Check Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,979 gallons.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 2,979 gallons.
DF-86 Blend Tank (Vents to DE-20)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,485 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of a Group 1 or Group 2 batch process vent.	Vent contains > 50 ppm of HAP on a dry basis but < 200 lbs/yr of HAP emissions.
DF-87 Biocide Check Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.

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DF-87 Biocide Check Tank (Continued)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels 40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.). DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 6,659 gallons. Tank volume is 6,659 gallons.
DF-89A Amino Check Tank	LAC 33-III.2103 Storage of Volatile Organic Compounds 40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels 40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia. DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.). DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Maximum true vapor pressure of stored contents is less than 1.5 psia. Tank volume is 5,500 gallons. Tank volume is 5,500 gallons.

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DF-89B Amino Check Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 5,500 gallons.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 5,500 gallons.
DF-90A Oxazolidine Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 4,512 gallons.

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DF-90B Oxazolidine Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb; VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 4,512 gallons.
DH-01 Hydraulic Conveyor	LAC 33:III.2115.H1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H1.c or d.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of a Group 1 or Group 2 batch process vent.	Vent contains > 50 ppm of HAP on a dry basis but < 200 lbs/yr of HAP emissions.
DH-03 Delumper/Conveyor System	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Vent does not meet the definition of Batch Process Vent or Continuous Process Vent.	This vent contains no organic HAPs.

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DK-01 Loading/Unloading (Tank Trucks & Drums)	LAC 33:III.2107 Volatile Organic Compounds – Loading	NON-APPLICABILITY DETERMINATION MADE. Loading facilities for VOCs having a true vapor pressure at loading conditions less than 1.5 psia or less than 20,000 gallons/day averaged over any 30-day period are not subject to the control and monitoring requirements of Section 2107.	Maximum true vapor pressure of VOCs at loading conditions is less than 1.5 psia.
DR-01 Condensation Reactor	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Vent does not meet the definition of a Group 1 or Group 2 batch process vent.	Vent contains > 50 ppm of HAP on a dry basis but < 200 lbs/yr of HAP emissions.
DR-02A GA Hydrogenation Autoclave (Vents to DE-26)	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.

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DR-02B GA Hydrogenation Autoclave (Vents to DE-26)	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
DR-03 Condensation Reactor	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Vent does not meet the definition of a Group 1 or Group 2 batch process vent.	Vent contains > 50 ppm of HAP on a dry basis but < 200 lbs/yr of HAP emissions.
DR-04A TA Hydrogenation Autoclave (Vents to DE-26)	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
DR-04B AMP Autoclave (Vents to DE-26)	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.

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ID No:	Requirement	Compliance Method/Provision	Notes
DR-07 AMP Autoclave (Vents to DE-26)	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
DR-06 / DR-09 General Purpose Reactor / Condensation Reactor System	LAC 33:III.2115.H.1.c. Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24-hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
DT-01 Nitro Alcohol Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 5,094 gallons.
DT-02B Crude TA Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 11,656 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DT-03 Amine Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 5,094 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 5,094 gallons.
DT-05 NMP Storage	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 4,995 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DT-06 Crude AMP Storage (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels (>19,813 gal.)	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 11,656 gallons.
DT-07 TN Feed Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels (>19,813 gal.)	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 4,418 gallons.
DT-08A Crude Methanol Storage Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels (>19,813 gal.)	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank is 11,656 gallons.
DT-08C Crude Methanol Storage Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels (>19,813 gal.)	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank is 11,656 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DT-09A Methanol Storage Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements. (>19,813 gal.)	Tank is 11,656 gallons.
DT-09B Methanol Storage Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements. (>19,813 gal.)	Tank is 11,656 gallons.
DT-10 AMP/AZ Storage Tank	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements. (>19,813 gal.)	Tank is 3,360 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Bottoms Receiver does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 3,360 gallons.
DT-11 Recovered Methanol Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements. (>19,813 gal.)	Tank is 11,656 gallons.
DT-12 TN Drum Out Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.)	Tank volume is 6,610 gallons.

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ID No.	Requirement	Compliance Method/Provision	Notes
DT-16 TN Ion Exchange Feed Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 1,469 gallons.
DT-17 NMP Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 3,966 gallons.
DT-18 Reactor Hold Tank (Vents to DC-57)	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.

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DT-18 Reactor Hold Tank (Vents to DC-57)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 1,506 gallons.
DT-19 TN Feed Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,666 gallons.
DT-20 AX Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,666 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 2,666 gallons.
DT-23 Crude Amines Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 11,656 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DT-24 TN Feed Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 1,253 gallons.
DT-25 NPD Waste	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 6,734 gallons.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 6,734 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DT-27 Sulfuric Acid Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Tank does not store volatile organic compounds.	
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 993 gallons.
DT-28 Sulfuric Acid Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Tank does not store volatile organic compounds.	
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 370 gallons.
DT-29 NMP Truck Loading Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 3,470 gallons.

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ID No.	Requirement	Compliance Method/Provision	Notes
DT-30A Crude Methanol Storage Tank (Venis to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 11,656 gallons.
DT-30B ZT-55/Morpholine Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 11,656 gallons.
DT-31 Sulfuric Acid Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Tank does not store volatile organic compounds.	
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 675 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
DT-32 Amine/AX Tank	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 6,374 gallons.
	40 CFR 63.2430 NESHPAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 6,374 gallons.
DT-36A Crude AMP Storage Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 12,692 gallons.
DT-36B Crude AMP Storage Tank (Vents to DE-26)	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 11,656 gallons.
DT-55 Sulfuric Acid Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Tank does not store volatile organic compounds.	
	40 CFR 63.2430 NESHPAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 6,768 gallons.
F-7 Derivatives Fugitives – Formaldehyde	LAC 33:III.2121 Fugitive Emission Control	DOES NOT APPLY. This unit is not an affected facility listed in LAC 33:III.2121.A.	

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F-7D Derivatives Fugitives	LAC 33:III.2121 Fugitive Emission Control	DOES NOT APPLY. This unit is not an affected facility listed in LAC 33:III.2121.A.	
	Louisiana MACT Determination for Non-HON Equipment Leaks	DOES NOT APPLY. Class III TAP(s) emitted only; must meet Ambient Air Standard (AAS); No MACT requirements.	
F-42 Hydrogen Knock-out Pot	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. Flow-through process vessels are not operated as "storage tanks".	
	LAC 33:III.2115.H.1.c Waste Gas Disposal	EXEMPTION CRITERIA MET. Waste gas stream containing VOC is exempt from the control requirements of Section 2115, as the emission of the waste gas stream is equal to or less than 100 lbs. of VOC/24 hr. period.	Exempt per LAC 33:III.2115.H.1.c or d.
	40 CFR 63.2430	DOES NOT APPLY. Vent does not meet the definition of a Group 1 or Group 2 batch process vent.	Vent contains > 50 ppm of HAP on a dry basis but < 200 lbs/yr of HAP emissions.
	NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		

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G-44N TA-40 Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank was not constructed, reconstructed, or modified since July 23, 1984	Storage vessel constructed before July 23, 1984.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 47,001 gallons.
G-44S TA-40 Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank was not constructed, reconstructed, or modified since July 23, 1984	Storage vessel constructed before July 23, 1984.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 47,001 gallons.

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HT-08 Hold Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 2,909 gallons.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 2,909 gallons.
HT-09 Waste Amines Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 10,516 gallons.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 10,516 gallons.

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ID No:	Requirement	Compliance Method/Provision	Notes
RL-01 Loading/Unloading (Rail Cars)	LAC 33.III.2107 Volatile Organic Compounds - Loading	NON-APPLICABILITY DETERMINATION MADE. Loading facilities for VOCs having a true vapor pressure at loading conditions less than 1.5 psia or less than 20,000 gallons/day averaged over any 30-day period are not subject to the control and monitoring requirements of Section 2107.	Maximum true vapor pressure of VOCs at loading conditions is less than 1.5 psia. -
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Does not meet the definition of a Transfer Rack.	Loading rack loads material that would contain organic HAPs only as impurities. No controls required.
XK-01 Loading/Unloading (Tank Trucks)	LAC 33.III.2107 Volatile Organic Compounds - Loading	NON-APPLICABILITY DETERMINATION MADE. Loading facilities for VOCs having a true vapor pressure at loading conditions less than 1.5 psia or less than 40,000 gallons/day (averaged over any 30-day period), if constructed prior to May 20, 1979, are not subject to the control and monitoring requirements of Section 2107.	Less than 40,000 gallons/day averaged over any 30-day period.

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 AGENCY INTEREST NO.: 1556
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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Compliance Method/Provision	Notes	
XK-02 Loading/Unloading (Tank Trucks)	LAC 33:III.2107 Volatile Organic Compounds - Loading	NON-APPLICABILITY DETERMINATION MADE. Loading facilities for VOCs having a true vapor pressure at loading conditions less than 1.5 psia or less than 40,000 gallons/day averaged over any 30-day period are not subject to the control and monitoring requirements of Section 2107.	Maximum true vapor pressure of VOCs at loading conditions is less than 1.5 psia.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Does not meet the definition of a Transfer Rack.	Loading rack loads material that would contain organic HAPs only as impurities. No controls required.
XT-04B AMP Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.	Tank volume is 27,498 gallons. Vapor Pressure <2.2 psia.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 27,498 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Shipping Department	Compliance Method/Provision	Notes
DE-19 Formaldehyde Scrubber for DT-13 and DT-14	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.		Tanks controlled by this scrubber are Group 2 storage tanks.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tanks venting to this control device meet the definition of Group 2 storage tank, no controls required.		
DT-13 50% Formaldehyde Tank (Vents to DE-19)	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.		Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.		Storage vessel constructed in 1995. Tank is 21,701 gallons. Maximum true vapor pressure of stored contents is <2.2 psia at storage conditions.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
DT-14 50% Formaldehyde Tank (Vents to DE-19)	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.	Storage vessel constructed in 1995. Tank is 21,701 gallons. Maximum true vapor pressure of stored contents is <2.2 psia at storage conditions.
F-7S Shipping Fugitives	LAC 33:III.2121 Fugitive Emission Control	DOES NOT APPLY. This unit is not an affected facility listed in LAC 33:III.2121.A	
	Louisiana MACT Determination for Non-HON Equipment Leaks	DOES NOT APPLY. Class III TAP(s) emitted only; must meet AAS; No MACT requirements.	
WL-01 Warehouse Drum Loading	LAC 33:III.2107 Volatile Organic Compounds - Loading	NON-APPLICABILITY DETERMINATION MADE. Loading facilities for VOCs does not service tanks, trucks or trailers which have individual capacities in excess of 200 gallons (760 liters).	Drum/tote loading only

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
WL-01 Warehouse Drum Loading (Continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Does not meet the definition of a Transfer Rack	Loading rack loads an organic HAP (methanol); however, material is loaded into drums/totes only, not trucks or railcars; therefore, no controls required.
XT-01 TA-40 Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (<19,813 gal.).	Tank volume is 15,276 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 15,276 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
XT-02A Amino Alcohol Storage Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.	Tank volume is 27,498 gallons. Vapor pressure <2.2 psia.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required	Tank volume is 27,498 gallons.
XT-02B Amino Alcohol Storage Tank	LAC 33.III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.	Tank volume is 27,498 gallons. Vapor pressure <2.2 psia.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 27,498 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
XT-09A Amino Alcohol Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.	Tank volume is 27,498 gallons. Vapor pressure <2.2 psia.
	40 CFR 63.2430 NESHPAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 27,498 gallons.
XT-09B Amino Alcohol Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.	Tank volume is 27,498 gallons. Vapor pressure <2.2 psia.
	40 CFR 63.2430 NESHPAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 27,498 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
XT-09B Amino Alcohol Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.	Tank volume is 27,498 gallons. Vapor pressure <2.2 psia.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 27,498 gallons.
XT-09C Amino Alcohol Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank capacity/vapor pressure >19,813 gal., <39,890 gal., and VP <2.2 psia.	Tank volume is 27,498 gallons. Vapor pressure <2.2 psia.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 27,498 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
XT-10 TA Solution/Biocide Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 15,276 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 15,276 gallons.
XT-113 Biocide Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 18,786 gallons.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 18,786 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
XT-115 Amino Alcohol Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >39,890 gal. and VP <0.5 psia.	Tank volume is 165,293 gallons. Maximum true vapor pressure of stored contents < 0.5 psia.	Tank volume is 165,293 gallons. Maximum true vapor pressure of stored contents < 0.5 psia.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 165,293 gallons.	Tank volume is 165,293 gallons.
XT-133 Amino Alcohol Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >39,890 gal. and VP <0.5 psia.	Tank volume is 533,173 gallons. Maximum true vapor pressure of stored contents < 0.5 psia.	Tank volume is 533,173 gallons. Maximum true vapor pressure of stored contents < 0.5 psia.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Compliance Method/Provision	Notes
XT-133 Amino Alcohol Storage Tank (Continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 533,173 gallons.
XT-134 Amino Alcohol Storage Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank capacity/vapor pressure >39,890 gal. and VP <0.5 psia.	Tank volume is 105,941 gallons. Maximum true vapor pressure of stored contents < 0.5 psia.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 105,941 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source

ID No.	Requirement	Compliance Method/Provision	Notes
XT-14 Oxazolidine/Amino Alcohol Storage	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels		DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 18,786 gallons.
40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing		DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 18,786 gallons.
XT-15 AEPD-85 Storage	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity requirements (>19,813 gal.).	Tank volume is 18,786 gallons.

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XI. Explanation for Exemption Status or Non-Applicability of a Source			
ID No:	Requirement	Compliance Method/Provision	Notes
XT-15 AEPD-85 Storage (Continued)	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 18,786 gallons.
XT-17 Amino Alcohol Blend Tank	LAC 33:III.2103 Storage of Volatile Organic Compounds	NON-APPLICABILITY DETERMINATION MADE. The maximum true vapor pressure of the stored contents, at storage conditions, is less than 1.5 psia.	Maximum true vapor pressure of stored contents is less than 1.5 psia.
	40 CFR 60.110b NSPS Subpart Kb, VOL Storage Vessels	DOES NOT APPLY. Tank does not meet the capacity/vapor pressure requirements (>19,813 gal., <39,890 gal., and VP <2.2 psia).	Tank volume is 27,498 gallons. Vapor pressure <2.2 psia.
	40 CFR 63.2430 NESHAP Subpart FFFF; Miscellaneous Organic Chemical Manufacturing	DOES NOT APPLY. Tank does not meet the definition of a Storage Tank, contains HAPs only as impurities, no controls required.	Tank volume is 27,498 gallons.

The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section X of this permit.

General Information

AI ID: 1556 Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Also Known As:	ID	Name	User Group	Start Date
	2160-00015	Angus Chemical Co	CDS Number	08-05-2002
36-318557		Federal Tax ID	Federal Tax ID	11-21-1999
LAD020597597		Angus Chemical Co	Hazardous Waste Notification	11-19-1980
PMT		GPRAS Baselines	Hazardous Waste Permitting	10-01-1997
00060		IMC Fertilizer Group	Inactive & Abandoned Sites	10-01-1979
LAD020597597		IMC Fertilizer & Chemical Corp	Inactive & Abandoned Sites	10-01-1979
LA0007854		LPDES #	LPDES Permit #	06-25-2003
GP10700		LWDPs #	LWDPs Permit #	11-21-1999
WP1513		LWDPs #	LWDPs Permit #	06-25-2003
GD-073-0334		Priority 1 Emergency Site	Priority 1 Emergency Site	07-18-2006
GD-073-3625		Site ID #	Solid Waste Facility No.	12-29-2004
11894		IMC-Pace Lake Plant	Site ID #	07-24-2001
11898		IMC-Pace Lake Plant	TEMPO Merge	04-23-2001
17296		IMC Corp	TEMPO Merge	12-04-2000
19552		Angus Chemical Co	TEMPO Merge	10-25-2000
4878		Angus Chemical Co	TEMPO Merge	10-24-2000
48814		IMC Fertilizer Inc	TEMPO Merge	03-20-2001
52421		Angus Chemical Co	TEMPO Merge	10-25-2000
71280NGSCHLAHWY		TRI #	Toxic Release Inventory	07-08-2004
37005090		UST Facility ID (from UST legacy data)	UST FID #	10-11-2002
Physical Location:			Main Phone:	3186650010
Mailing Address:	PO Box 1325			
Location of Front Gate:	Sterlington, LA 712801325			
Related People:	Name	Mailing Address	Phone (Type)	Relationship
	Karen Kay	PO Box 1325 Sterlington, LA 712801325	3186655434 (WP)	Responsible Official for
	Karen Kay	PO Box 1325 Sterlington, LA 712801325	kekay@dow.com (E)	Responsible Official for
	J. Ron Pindexter	PO Box 1325 Sterlington, LA 712801325	3186655293 (WP)	Haz. Waste Billing Party for
	J. Ron Pindexter	PO Box 1325 Sterlington, LA 712801325	JRPINDEXTER@C	Haz. Waste Billing Party for
	John Sutton	PO Box 1325 Sterlington, LA 712801325		Solid Waste Billing Party for

General Information

AI ID: 1556 Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Related People:	Name	Mailing Address	Phone (Type)	Relationship
	John Sutton	PO Box 1325 Sterlington, LA 712801325		Underground Storage Tank Contact for
	John Sutton	PO Box 1325 Sterlington, LA 712801325		Accident Prevention Billing Party for
	John Sutton	PO Box 1325 Sterlington, LA 712801325		Water Billing Party for
	Stephanie Wilson	350 LA Hwy 2 Sterlington, LA 71280	swilson@dow.com (3186655332 (WP)	Emission Inventory Contact for
	Stephanie Wilson	350 LA Hwy 2 Sterlington, LA 71280		Emission Inventory Contact for
Related Organizations:	Name	Address	Phone (Type)	Relationship
	Angus Chemical Co	PO Box 1325 Sterlington, LA 712801325		Owns
	Angus Chemical Co	c/o CT Corporation System Baton Rouge, LA 70808		Agent of Service for
	Angus Chemical Co	PO Box 1325 Sterlington, LA 712801325		Emission Inventory Billing Party
	Angus Chemical Co	PO Box 1325 Sterlington, LA 712801325		Air Billing Party for
IAC Codes:	325199, All Other Basic Organic Chemical Manufacturing			

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr. David Ferrand, Environmental Assistance Division, at (225) 219-0775 or email your changes to facupdate@la.gov.

INVENTORIES

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Nitroparaffins Derivatives Plant and Related Units						
EQT 0092	BT-108 - Waste Alcohol Tank	9223 gallons	.2 MM gallons/yr	.2 MM gallons/yr		8760 hr/yr
EQT 0093	CD-10 - Centrifuge					8760 hr/yr
EQT 0094	CE-01 - Butanol Column System					8760 hr/yr
EQT 0095	CE-02 - Air Scrubber System					8760 hr/yr
EQT 0096	CE-03 - Butanol Stripper System					8760 hr/yr
EQT 0097	CE-05 - Stripper System					8760 hr/yr
EQT 0098	CF-06 - Mother Liquor Receiver	864 gallons				8760 hr/yr
EQT 0099	CF-10 - Crystallizer Feed Tank	1249 gallons				8760 hr/yr
EQT 0100	CF-13 - Extraction Tank	306 gallons				8760 hr/yr
EQT 0105	CF-16 - Surge Tank System					8760 hr/yr
EQT 0106	CG-01 - TA Crystallizer System					8760 hr/yr
EQT 0107	CG-12 - Mother Liquor Evaporator System					8760 hr/yr
EQT 0108	CG-23 - Flame Arrestor for CF-13, CF-14, and CF-15					8760 hr/yr
EQT 0109	CG-32 - TAUP Dryer System					8760 hr/yr
EQT 0110	CJ-59 - Delumper Pneumatic System Dust Filter					8760 hr/yr
EQT 0111	CK-01 - Loading/Unloading (Tank Trucks)	400 gallons/min				8760 hr/yr
EQT 0112	CR-01 - Crystallizer					8760 hr/yr
EQT 0113	CR-02 - Crystallizer					8760 hr/yr
EQT 0114	CT-02 - TA Solution Tank	11751 gallons				8760 hr/yr
EQT 0115	CT-04 - Butanol Tank	11751 gallons				8760 hr/yr
EQT 0116	CT-01 - Hold Tank	2918 gallons				8760 hr/yr
EQT 0117	CT-09 - Hold Tank	2918 gallons				8760 hr/yr
EQT 0118	CT-11 - Mother Liquor Receiver	5052 gallons				8760 hr/yr
EQT 0119	CT-14 - TA Solution Tank	9042 gallons				8760 hr/yr
EQT 0120	CW-3 - Cooling Tower 3	31500 gallons/min				8760 hr/yr
EQT 0121	DC-57 - Condenser for DR-05 (reactor) and DT-18 (tank)					8760 hr/yr
EQT 0122	DE-03 - AMP Refining Column System					8760 hr/yr
EQT 0123	DE-04 - AX Refining Column System					8760 hr/yr
EQT 0124	DE-05 - General Purpose Column System					8760 hr/yr
EQT 0125	DE-09 - TA Stripper System					8760 hr/yr
EQT 0126	DE-13 - Methanol Finishing Column System					8760 hr/yr
EQT 0127	DE-14 - AMP/Methanol Stripper Column System					8760 hr/yr
EQT 0128	DE-15 - Dehydration Column System					8760 hr/yr
EQT 0129	DE-16 - AMP Refining Column System					8760 hr/yr
EQT 0130	DE-19 - Formaldehyde Scrubber for DT-13 and DT-14					8760 hr/yr
EQT 0131	DE-20 - Vert Scrubber for Amines Check Tanks					8760 hr/yr
EQT 0134	DF-06A - GA Autoclave Seilling Tank	1554 gallons				8760 hr/yr
EQT 0135	DF-06B - GA Autoclave Seilling Tank	1554 gallons				8760 hr/yr
EQT 0136	DF-07 - Spent Catalyst Tank	564 gallons				8760 hr/yr

INVENTORIES

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Object Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Isoparaffins Derivatives Plant and Related Units						
QT 0137	DF-12 - Nitro Alcohol Transfer Tank	1175 gallons		1.08 MM gallons/yr		8760 hr/yr
QT 0138	DF-48A - TA Settling Tank	4030 gallons				8760 hr/yr
QT 0139	DF-48B - TA Settling Tank	4030 gallons				8760 hr/yr
QT 0140	DF-56A - AMP Settling Tank	4030 gallons				8760 hr/yr
QT 0141	DF-56B - AMP Settling Tank	4030 gallons				8760 hr/yr
QT 0142	DF-71 - Amino Tank	7051 gallons				8760 hr/yr
QT 0143	DF-72 - ZT-55/Morpholine Storage Tank	7051 gallons				8760 hr/yr
QT 0144	DF-73 - Evaporator Charge Tank	5056 gallons				8760 hr/yr
QT 0145	DF-74 - Falling Film Evaporator Separator System	4125 gallons				8760 hr/yr
QT 0146	DF-78A - AMP Autoclave Catalyst Settling Tank	4125 gallons				8760 hr/yr
QT 0147	DF-78B - AMP Autoclave Catalyst Settling Tank	2979 gallons				8760 hr/yr
QT 0148	DF-85 - AMP Check Tank	6659 gallons				8760 hr/yr
QT 0149	DF-87 - Biocide Check Tank	5500 gallons				8760 hr/yr
QT 0150	DF-89A - Amino Check Tank	5500 gallons				8760 hr/yr
QT 0151	DF-89B - Amino Check Tank	4512 gallons				8760 hr/yr
QT 0152	DF-90A - Oxazolidine Storage Tank	4512 gallons				8760 hr/yr
QT 0153	DF-90B - Oxazolidine Storage Tank	4000 gallons				8760 hr/yr
QT 0154	DF-95 - IPHA Dilution Tank	8226 gallons				8760 hr/yr
QT 0155	DF-97 - IPHA Blend Tank			4.38 MM lbs/yr		8760 hr/yr
QT 0156	DH-01 - Hydraulic Conveyor			8 MM lbs/yr		8760 hr/yr
QT 0157	DH-03 - Delumper/Conveyor system			400 gallons/min		8760 hr/yr
QT 0158	DK-01 - Loading/Unloading Tank Trucks & Drums					8760 hr/yr
QT 0159	DR-01 - Condensation Reactor	1000 gallons				8760 hr/yr
QT 0160	DR-02A - GA Hydrogenation Autoclave	2000 gallons				8760 hr/yr
QT 0161	DR-02B - GA Hydrogenation Autoclave	2000 gallons				8760 hr/yr
QT 0162	DR-03 - Condensation Reactor	1000 gallons				8760 hr/yr
QT 0163	DR-04A - TA Hydrogenation Autoclave	4000 gallons				8760 hr/yr
QT 0164	DR-04B - AMP Autoclave	4000 gallons				8760 hr/yr
QT 0165	DR-05 - Condensation Reactor	1000 gallons				8760 hr/yr
QT 0166	DR-06 - General Purpose Reactor	1000 gallons				8760 hr/yr
QT 0167	DR-07 - AMP Autoclave	4000 gallons				8760 hr/yr
QT 0168	DR-09 - Condensation Reactor System	2000 gallons				8760 hr/yr
QT 0169	DR-10 - IPHA Reactor	2000 gallons				8760 hr/yr
QT 0170	DT-01 - Nitro/Alcohol Storage Tank	5034 gallons				8760 hr/yr
QT 0172	DT-02B - Crude TA Storage	11656 gallons				8760 hr/yr
QT 0173	DT-03 - Amine Tank	5094 gallons				8760 hr/yr
QT 0174	DT-05 - NMP Storage	4995 gallons				8760 hr/yr
QT 0175	DT-06 - Crude AMP Storage	11656 gallons				8760 hr/yr
QT 0176	DT-07 - TN Feed Tank	4418 gallons				8760 hr/yr

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INVENTORIES

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Nitroparaffins Derivatives Plant and Related Units						
EQT 0177	DT-08A - Crude Methanol Storage Tank	11656 gallons				8760 hr/yr
EQT 0178	DT-08C - Crude Methanol Storage Tank	11656 gallons				8760 hr/yr
EQT 0179	DT-09A - Methanol Storage Tank	11656 gallons				8760 hr/yr
EQT 0180	DT-09B - Methanol Storage Tank	11656 gallons				8760 hr/yr
EQT 0181	DT-10 - AMP/AX Storage Tank	3360 gallons				8760 hr/yr
EQT 0182	DT-11 - Recovered Methanol Tank	11655 gallons				8760 hr/yr
EQT 0183	DT-12 - TN Drum Out Tank	6610 gallons				8760 hr/yr
EQT 0184	DT-13 - 50% Formaldehyde Tank	21701 gallons				8760 hr/yr
EQT 0185	DT-14 - 50% Formaldehyde Tank	21701 gallons				8760 hr/yr
EQT 0186	DT-16 - TN Ion Exchange Feed Tank	1469 gallons				8760 hr/yr
EQT 0187	DT-17 - NMP Storage Tank	3966 gallons				8760 hr/yr
EQT 0188	DT-18 - Reactor Hold Tank	15066 gallons				8760 hr/yr
EQT 0189	DT-19 - TN Feed Tank	26666 gallons				8760 hr/yr
EQT 0190	DT-20 - AX Storage Tank	5094 gallons				8760 hr/yr
EQT 0191	DT-23 - Crude Amines Tank	11656 gallons				8760 hr/yr
EQT 0192	DT-24 - TN Feed Tank	1253 gallons				8760 hr/yr
EQT 0193	DT-25 - NPD Waste	61734 gallons				8760 hr/yr
EQT 0194	DT-27 - Sulfuric Acid Tank	993 gallons				8760 hr/yr
EQT 0195	DT-28 - Sulfuric Acid	370 gallons				8760 hr/yr
EQT 0196	DT-29 - NMP Truck Loading Tank	3470 gallons				8760 hr/yr
EQT 0197	DT-30A - Crude Methanol Storage Tank	11656 gallons				8760 hr/yr
EQT 0198	DT-35 - ZF-55/Morpholine Tank	11656 gallons				8760 hr/yr
EQT 0199	DT-31 - Sulfuric Acid Tank	674 gallons				8760 hr/yr
EQT 0200	DT-32 - Amine/AX Tank	6374 gallons				8760 hr/yr
EQT 0201	DT-35 - IPHA Storage Tank	21152 gallons				8760 hr/yr
EQT 0202	DT-36A - Crude AMP Storage Tank	12692 gallons				8760 hr/yr
EQT 0203	DT-36B - Crude AMP Storage Tank	11656 gallons				8760 hr/yr
EQT 0204	G-44N - TA-40 Storage Tank	47001 gallons				8760 hr/yr
EQT 0205	G-41S - TA-40 Storage Tank	47001 gallons				8760 hr/yr
EQT 0207	G-66 - Wet Butanol Tank	8275 gallons				8760 hr/yr
EQT 0208	G-67 - Butanol Extraction Tank	10625 gallons				8760 hr/yr
EQT 0209	G-79 - Water Phase Tank	8161 gallons				8760 hr/yr
EQT 0210	G-81 - NPC Waste Tank	6392 gallons				8760 hr/yr
EQT 0211	HF-14 - CE-03 Condensed Overheads Tank	1028 gallons				8760 hr/yr
EQT 0212	HT-04 - TA-60 Storage Tank	4245 gallons				8760 hr/yr
EQT 0213	HT-08 - Hold Tank	2919 gallons				8760 hr/yr
EQT 0214	HT-09 - Waste Amines Tank	10576 gallons				8760 hr/yr
EQT 0216	RL-01 - Loading/Unloading (Railcars)	400 gallons/min				8760 hr/yr
EQT 0217	UG-11 - Hydrogen Plant Flare	4250 ft ³ /min (actual)				8760 hr/yr

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INVENTORIES

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Subject Item Inventory:		Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
ID							
Nitroparaffins Derivatives Plant and Related Units							
EQT 0218	UR-01 - Steam Gas Reformer Heater			47.44 MM BTU/hr			8760 hr/yr
EQT 0219	WL-01 - Warehouse Drum Loading			400 gallons/min			8760 hr/yr
EQT 0220	XK-01 - Loading/Unloading (Tank Trucks)			400 gallons/min			8760 hr/yr
EQT 0221	XK-02 - Loading/Unloading (Tank Trucks)			400 gallons/min			8760 hr/yr
EQT 0222	XT-01 - TA-40 Storage Tank	15276 gallons			1.9 MM gallons/yr		
EQT 0223	XT-02A - Amino Alcohol Storage Tank	27496 gallons			7.9 MM gallons/yr		
EQT 0224	XT-02B - Amino Alcohol Storage Tank	27496 gallons			7.9 MM gallons/yr		
EQT 0226	XT-04B - AMP Storage Tank	27498 gallons			.72 MM gallons/yr		
EQT 0227	XT-09A - Amino Alcohol Storage Tank	27498 gallons			3.6 MM gallons/yr		
EQT 0228	XT-09B - Amino Alcohol Storage Tank	27498 gallons			3.6 MM gallons/yr		
EQT 0229	XT-09C - Amino Alcohol Storage Tank	15276 gallons			7.9 MM gallons/yr		
EQT 0230	XT-10 - TA Solution/Biocide Storage Tank	18786 gallons			3.5 MM gallons/yr		
EQT 0231	XT-113 - Biocide Storage Tank	533173 gallons			1.5 MM gallons/yr		
EQT 0232	XT-115 - Amino Alcohol Storage Tank	533173 gallons			6.45 MM gallons/yr		
EQT 0233	XT-133 - Amino Alcohol Storage Tank	105941 gallons			3.6 MM gallons/yr		
EQT 0234	XT-134 - Amino Alcohol Storage Tank	18786 gallons			4.51 MM gallons/yr		
EQT 0235	XT-14 - Oxazolidinedine/Amino Alcohol Storage Tank	18786 gallons			1.81 MM gallons/yr		
EQT 0236	XT-15 - AEPD-85 Storage	27498 gallons			3.58 MM gallons/yr		
EQT 0237	XT-17 - Amino Alcohol Blend Tank	103648 gallons			3.84 MM gallons/yr		
EQT 0238	XT-36 - IPHA Storage Tank	103638 gallons			.65 MM gallons/yr		
EQT 0239	XT-37 - Oxadiazine Storage Tank	159 gallons			1.75 MM gallons/yr		
EQT 0246	CF-14 - TA Dissolving Tank	110 gallons			97 ft ³ /min (actual)		
EQT 0247	CF-15 - Butanol Extract Receiver	6768 gallons			.22 MM gallons/yr		
EQT 0248	F-42 - Hydrogen Knock-out Pot						
EQT 0276	DT-55 - Sulfuric Acid Tank						
EQT 0277	DE-26 - NPD Flare System				.8 MM gallons/yr		
EQT 0279	CT-22 - Methanol Tank	8800 gallons					
EQT 0280	DF-17A - AMP Check Tank	1470 gallons					
EQT 0281	DF-17B AMP Check Tank	1470 gallons					
EQT 0282	DF-21 - Amino/Nitro Check Tank	1090 gallons					
EQT 0283	DF-25 - Biocide Check Tank	2060 gallons					
EQT 0284	DF-27 - AMP Intermediate Receiver Tank	1055 gallons					
EQT 0285	DF-28 - Biocide Check Tank	2080 gallons					
EQT 0286	DF-29 - Biocide Check Tank	2080 gallons					
EQT 0287	DF-30 - Recovery Still Receiver Tank	2080 gallons					
EQT 0288	DF-31 - Recovery Still Receiver Tank	4175 gallons					
EQT 0289	DF-36 - AMP Check Tank	2485 gallons					
EQT 0290	DF-86 - Blend Tank						

FUG 0003 F-7 - Derivatives Fugitives - Formaldehyde

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INVENTORIES

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Nitroparaffins Derivatives Plant and Related Units						
FUG 0004	F-7C - Crystals Fugitives					8760 hr/yr
FUG 0005	F-7D - Derivatives Fugitives					8760 hr/yr
FUG 0006	F-7S - Shipping Fugitives					8760 hr/yr
RLP 0004	UF-06 - Deaerator/Vent					8760 hr/yr
Stack Information:						
ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)
Nitroparaffins Derivatives Plant and Related Units						
EOT 0092	BT-108 - Waste Alcohol Tank		.26			20
EOT 0093	CD-10 - Centrifuge	764.328	.07			41.8
EOT 0095	CE-02 - Air Scrubber System	3.41	1.41			120
EOT 0096	CE-03 - Butanol Stripper System		.16			85
EOT 0097	CE-05 - Stripper System		.16			26.8
EOT 0098	CF-06 - Mother Liquor Receiver		.26			26.6
EOT 0099	CF-10 - Crystallizer Feed Tank		.26			125
EOT 0100	CF-13 - Extraction Tank		.26			50.1
EOT 0105	CF-16 - Surge Tank System	1.53	.33			100
EOT 0106	CG-01 - TA Crystallizer System	434	.26			14
EOT 0107	CG-12 - Mother Liquor Evaporator System	48	.98			150
EOT 0108	CG-23 - Flame Arrestor for CF-13, CF-14, and CF-15	1.71	.5			110
EOT 0109	CG-32 - TAUP Dryer System	14.1	.16			110
EOT 0112	CR-01 - Crystallizer	764.33	.16			200
EOT 0113	CR-02 - Crystallizer	764.33	.16			200
EOT 0114	CT-02 - TA Solution Tank		.26			22
EOT 0115	CT-04 - Butanol Tank		.26			140
EOT 0116	CT-07 - Hold Tank		.26			220
EOT 0117	CT-09 - Hold Tank					100
EOT 0118	CT-11 - Mother Liquor Receiver	11.94	.66			100
EOT 0119	CT-14 - TA Solution Tank	4.59	.16			130
EOT 0122	DE-03 - AMP Refining Column System	10.5	.16			41.8
EOT 0123	DE-04 - AX Refining Column System	2.31	.26			150
EOT 0124	DE-05 - General Purpose Column System	4.01	.33			110
						15
						145

INVENTORIES

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Stack Information:	ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
Nitroparaffins Derivatives Plant and Related Units								
EQT 0125	DE-09 - TA Stripper System	0	.26		.26		20	105
EQT 0126	DE-13 - Methanol Finishing Column System	0	.33		.26		22	110
EQT 0127	DE-14 - AMP/Methanol Stripper Column System	0	.26		.26		15	
EQT 0128	DE-15 - Dehydration Column System	0	.26		.16		25	150
EQT 0129	DE-16 - AMP Refining Column System	4.83		.16			25	120
EQT 0134	DF-06A - GA Autoclave Settling Tank			.33			51	
EQT 0135	DF-06B - GA Autoclave Settling Tank			.26			51	
EQT 0136	DF-07 - Sperit Catalyst Tank			.26			8	100
EQT 0137	DF-12 - Nitro Alcohol Transfer Tank			.33			10	100
EQT 0138	DF-48A - TA Settling Tank			.33			40.3	
EQT 0139	DF-48B - TA Settling Tank			.33			40.3	
EQT 0140	DF-56A - AMP Settling Tank			.33			40.3	
EQT 0141	DF-56B - AMP Settling Tank			.33			15	180
EQT 0142	DF-71 - Amino Tank			.33			15	100
EQT 0143	DF-72 - ZT-55/Morpholine Storage Tank			.26			22	105
EQT 0144	DF-73 - Evaporator Charge Tank			.26			22	125
EQT 0145	DF-74 - Falling Film Evaporator Separator System	5.68		.26			50	
EQT 0146	DF-78A - AMP Autoclave Catalyst Settling Tank			.33			50	
EQT 0147	DF-78B - AMP Autoclave Catalyst Settling Tank			.33			50	
EQT 0148	DF-85 - AMP Check Tank			.26			10	175
EQT 0149	DF-87 - Biocide Check Tank			.33			14	160
EQT 0150	DF-89A - Amino Check Tank			.33			18	200
EQT 0151	DF-89B - Amino Check Tank			.33			18	140
EQT 0152	DF-90A - Oxazolidine Storage Tank			.33			18	140
EQT 0153	DF-90B - Oxazolidine Storage Tank			.33			15	160
EQT 0154	DF-95 - IPHA Dilution Tank			.33			15	125
EQT 0155	DF-97 - IPHA Blend Tank						100	
EQT 0156	DH-01 - Hydraulic Conveyor						4	100
EQT 0157	DH-03 - Delumper/Conveyor system						34	105
EQT 0159	DR-01 - Condensation Reactor			.03			15	
EQT 0160	DR-02A - GA Hydrogenation Autoclave						16	
EQT 0161	DR-02B - GA Hydrogenation Autoclave						15	

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INVENTORIES

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
Nitroparaffins Derivatives Plant and Related Units							
EQT 0162 DR-03 - Condensation Reactor		1.8		.26		13.2	150
EQT 0163 DR-04A - TA Hydrogenation Autoclave				.16		18.8	
EQT 0164 DR-04B - AMP Autoclave				.16		18.8	
EQT 0165 DR-05 - Condensation Reactor				.33		42	
EQT 0166 DR-06 - General Purpose Reactor		.03		.49		35	120
EQT 0167 DR-07 - AMP Autoclave				.16		18.8	
EQT 0168 DR-09 - Condensation Reactor System		0		.49		35	125
EQT 0169 DR-10 - IPHA Reactor			7.64	.16		30	100
EQT 0170 DT-01 - Nitro/Alcohol Storage Tank				.33		18	
EQT 0172 DT-02B - Crude TA Storage				.26		17	100
EQT 0173 DT-03 - Amine Tank				.26		13	160
EQT 0174 DT-05 - NMP Storage				.33		13	149
EQT 0175 DT-06 - Crude AMP Storage				.33		16	
EQT 0176 DT-07 - TN Feed Tank				.26		14	110
EQT 0177 DT-08A - Crude Methanol Storage Tank				.33		16	
EQT 0178 DT-08C - Crude Methanol Storage Tank				.33		16	
EQT 0179 DT-09A - Methanol Storage Tank				.26		16	
EQT 0180 DT-09B - Methanol Storage Tank				.26		16	
EQT 0181 DT-10 - AMP/AX Storage Tank				.26		14	234
EQT 0182 DT-11 - Recovered Methanol Tank				.26		16	
EQT 0183 DT-12 - TN Drum Out Tank				.26		22	110
EQT 0184 DT-13 - 50% Formaldehyde Tank				.26		33	150
EQT 0185 DT-14 - 50% Formaldehyde Tank				.26		33	150
EQT 0186 DT-16 - TN Ion Exchange Feed Tank				.26		12	110
EQT 0187 DT-17 - NMP Storage Tank				.33		13	149
EQT 0188 DT-18 - Reactor Hold Tank				.26		11	
EQT 0189 DT-19 - TN Feed Tank				.26		17	110
EQT 0190 DT-20 - AX Storage Tank				.26		9.5	234
EQT 0191 DT-23 - Crude Amines Tank				.33		18	
EQT 0192 DT-24 - TN Feed Tank				.26		15.3	110
EQT 0193 DT-25 - NPD Waste				.33		11	200
EQT 0194 DT-27 - Sulfuric Acid Tank				.26		4	78

INVENTORIES

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Stack Information: ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
Vinylparaffins Derivatives Plant and Related Units							
EQT 0195 DT-28 - Sulfuric Acid		.26		.26		4	78
EQT 0196 DT-29 - NMP Truck Loading Tank		.26		.33		17	139
EQT 0197 DT-30A - Crude Methanol Storage Tank		.33		.26		16	
EQT 0198 DT-30B - ZT-55/Morpholine Tank		.26		.26		17	150
EQT 0199 DT-31 - Sulfuric Acid Tank		.26		.26		78	
EQT 0200 DT-32 - Amino/AX Tank		.26		.33		12	250
EQT 0201 DT-35 - IPHA Storage Tank		.33		.34		18	124
EQT 0202 DT-36A - Crude AMP Storage Tank		.34		.34		16	
EQT 0203 DT-36B - Crude AMP Storage Tank		.33		.33		22.3	190
EQT 0204 G-44N - TA-40 Storage Tank		.33		.26		22.3	190
EQT 0205 G-44S - TA-40 Storage Tank		.26		.26		17.2	150
EQT 0207 G-66 - Wet Butanol Tank		.26		.26		21.3	150
EQT 0208 G-67 - Butanol Extraction Tank		.26		.26		23.7	150
EQT 0209 G-79 - Water Phase Tank		.18		.18		31.7	150
EQT 0210 G-81 - NPC Waste Tank		.5		.16		7	150
EQT 0211 HF-14 - CE-03 Condensed Overheads Tank		.16		.16		20.9	150
EQT 0212 HT-04 - TA-60 Storage Tank		.16		.16		12.3	100
EQT 0213 HT-08 - Hold Tank		.33		.33		13	200
EQT 0214 HT-09 - Waste Amines Tank		.5		.4233		45	80
EQT 0217 UG-11 - Hydrogen Plant Flare		.5		.32	12000	56	300
EQT 0218 UR-01 - Steam Gas Reformer Heater		2.5		.49		28	170
EQT 0222 XT-01 - TA-40 Storage Tank		.33		.33		34	150
EQT 0223 XT-02A - Amino Alcohol Storage Tank		.33		.33		34	150
EQT 0224 XT-02B - Amino Alcohol Storage Tank		.33		.33		34	150
EQT 0226 XT-04B - AMP Storage Tank		.33		.33		34	180
EQT 0227 XT-09A - Amino Alcohol Storage Tank		.33		.33		34	180
EQT 0228 XT-09B - Amino Alcohol Storage Tank		.33		.33		34	180
EQT 0229 XT-09C - Amino Alcohol Storage Tank		.33		.33		28	170
EQT 0230 XT-10 - TA Solution/Biocide Storage Tank		.36		.36		28	160
EQT 0231 XT-113 - Biocide Storage Tank						200	
EQT 0232 XT-115 - Amino Alcohol Storage Tank						150	
EQT 0233 XT-133 - Amino Alcohol Storage Tank							

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INVENTORIES

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
EOT 0234	XT-134 - Amino Alcohol Storage Tank						150
EOT 0235	XT-14 - Oxazolidine/Amino Alcohol Storage Tank	26				30	150
EOT 0236	XT-15 - AEPD-85 Storage	26				30	180
EOT 0237	XT-17 - Amino Alcohol Blend Tank	33				34	150
EOT 0238	XT-36 - IPHA Storage Tank	49				30	100
EOT 0239	XT-37 - Oxazolidine Storage Tank	49				30	100
EOT 0248	F-42 - Hydrogen Knock-out Pot	96.5		5		59	77
EOT 0276	DT-55 - Sulfuric Acid Tank			36		18	78
EOT 0277	DE-26 - NPD Flare System			83		20	
EOT 0279	CT-22 - Methanol Tank			33		15	85
RLP 0094	UF-06 - Deaerator Vent	41.7	100	2		28	230

Relationships:

ID	Description	Relationship	ID	Description
EQT 0121	DC-57 - Condenser for DR-05 (reactor) and DT-18 (tank)	Controls emissions from	EOT 0165	DR-05 - Condensation Reactor
EQT 0121	DC-57 - Condenser for DR-05 (reactor) and DT-18 (tank)	Controls emissions from	EOT 0188	DT-18 - Reactor Hold Tank
EQT 0130	DE-19 - Formaldehyde Scrubber for DT-13 and DT-14	Controls emissions from	EOT 0184	DT-13 - 50% Formaldehyde Tank
EQT 0130	DE-19 - Formaldehyde Scrubber for DT-13 and DT-14	Controls emissions from	EOT 0185	DT-14 - 50% Formaldehyde Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0281	DF-17B - AMP Check Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0280	DF-17A - AMP Check Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0290	DF-86 - Blend Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0289	DF-36 - AMP Check Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0288	DF-31 - Recovery Still Receiver Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0287	DF-30 - Recovery Still Receiver Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0282	DF-21 - Amino/Nitro Check Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0283	DF-25 - Biocide Check Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0286	DF-29 - Biocide Check Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0285	DF-28 - Biocide Check Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0284	DF-27 - AMP Intermediate Receiver Tank
EQT 0131	DE-20 - Vent Scrubber for Amines Check Tanks	Controls emissions from	EOT 0172	DT-02B - Crude TA Storage
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EOT 0175	DT-06 - Crude AMP Storage
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EOT 0177	DT-08A - Crude Methanol Storage Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EOT 0178	DT-08C - Crude Methanol Storage Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EOT 0179	DT-09A - Methanol Storage Tank

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INVENTORIES

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Relationships:

ID	Description	Relationship	ID	Description
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0180	DT-09B - Methanol Storage Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0182	DT-11 - Recovered Methanol Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0191	DT-23 - Crude Amines Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0197	DT-30A - Crude Methanol Storage Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0202	DT-36A - Crude AMP Storage Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0167	DR-07 - AMP Autoclave
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0164	DR-04B - AMP Autoclave
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0163	DR-04A - TA Hydrogenation Autoclave
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0161	DR-02B - GA Hydrogenation Autoclave
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0160	DR-02A - GA Hydrogenation Autoclave
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0147	DF-78B - AMP Autoclave Catalyst Settling Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0146	DF-78A - AMP Autoclave Catalyst Settling Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0141	DF-56B - AMP Settling Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0140	DF-56A - AMP Settling Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0203	DT-36B - Crude AMP Storage Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0138	DF-48A - TA Settling Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0136	DF-07 - Spent Catalyst Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0135	DF-06B - GA Autoclave Settling Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0134	DF-06A - GA Autoclave Settling Tank
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0127	DE-14 - AMP/Methanol Stripper Column System
EQT 0277	DE-26 - NPD Flare System	Controls emissions from	EQT 0139	DF-48B - TA Settling Tank

Subject Item Groups:

ID	Group Type	Group Description
GRP 0025	Equipment Group	CAP-L1 - Loading Emissions CAP
UNF 0002	Unit or Facility Wide	NPD - Nitroparaffins Derivatives Plant and Related Units

Group Membership:

ID	Description	Member of Groups
EQT 0216	RL-01 - Loading/Unloading (Railcars)	GRP00000000025
EQT 0219	WL-01 - Warehouse Drum Loading	GRP00000000025
EQT 0220	XK-01 - Loading/Unloading (Tank Trucks)	GRP00000000025
EQT 0221	XK-02 - Loading/Unloading (Tank Trucks)	GRP00000000025

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

INVENTORIES

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

Annual Maintenance Fee:

Fee Number	Air Contaminant Source	Multipier	Units Of Measure
0630	0630 Organic Oxides, Alcohols, Glycols (Rated Capacity)	794	MM lbs/yr

SIC Codes:

2869	Industrial organic chemicals, nec	AI 1556	
2869	Industrial organic chemicals, nec	UNF 002	

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Vinylparaffins Derivatives Plant and Related Units															
EQT 0092 BT-108													0.29	197.64	1.26
EQT 0093 CD-10													0.37	0.42	1.61
EQT 0094 CE-01													0.01	0.01	0.02
EQT 0095 CE-02													0.14	0.17	0.62
EQT 0096 CE-03													0.002	0.002	0.01
EQT 0097 CE-05													0.01	0.58	0.04
EQT 0098 CF-06													0.002	0.01	0.01
EQT 0099 CF-10													<0.01	<0.01	<0.01
EQT 0105 CF-16													0.12	0.15	0.53
EQT 0106 CG-01													0.12	0.14	0.51
EQT 0107 CG-12													0.08	1.38	0.36
EQT 0108 CG-23													0.28	0.34	1.25
EQT 0109 CG-32													0.03	0.03	0.13
EQT 0110 CJ-59													0.09	100.71	0.40
EQT 0111 CK-01													0.01	0.02	0.06
EQT 0112 CR-01													0.01	0.02	0.06
EQT 0113 CR-02													0.01	2.12	0.06
EQT 0114 CT-02													1.26	225.36	5.54
EQT 0115 CT-04													0.01	0.12	0.06
EQT 0116 CT-07													0.01	0.12	0.06
EQT 0117 CT-09													0.12	2.54	0.55
EQT 0118 CT-11													0.01	2.05	0.04
EQT 0119 CT-14															

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007

Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Nitroparaffins Derivatives Plant and Related Units															
EQT 0120 CW-3							1.53	1.84	6.71						
EQT 0121 DC-57													0.38	0.45	1.66
EQT 0122 DE-03													0.59	0.71	2.59
EQT 0123 DE-04													0.01	0.01	0.03
EQT 0124 DE-05													0.77	0.93	3.39
EQT 0125 DE-09													0.003	0.004	0.02
EQT 0126 DE-13													0.02	0.02	0.09
EQT 0128 DE-15													0.08	0.09	0.35
EQT 0129 DE-16													0.13	0.16	0.57
EQT 0130 DE-19													0.02	1.37	0.09
EQT 0131 DE-20													0.19	35.76	0.82
EQT 0137 DE-12													<0.01	0.09	0.01
EQT 0142 DE-11													0.06	12.57	0.29
EQT 0143 DE-72													0.03	7.29	0.14
EQT 0144 DE-73													0.02	31.14	0.08
EQT 0145 DE-74													0.79	0.95	3.48
EQT 0148 DE-45													0.14	2.37	0.62
EQT 0149 DE-47													0.11	41.55	0.49
EQT 0150 DE-49A													0.14	3.08	0.63
EQT 0151 DE-49B													0.14	3.08	0.63
EQT 0152 DE-50A													<0.01	0.48	0.01
EQT 0153 DE-90B													<0.01	0.48	0.01
EQT 0154 DE-95													0.08	0.95	0.35

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Irradiation Derivatives Plant and Related Units															
EQT 0155 DF-97													0.02	0.47	0.07
EQT 0156 DH-01													0.02	0.06	0.02
EQT 0157 DH-03															
EQT 0158 DK-01															
EQT 0159 DR-01															
EQT 0162 DR-03															
EQT 0166 DR-06															
EQT 0168 DR-09															
EQT 0169 DR-10															
EQT 0170 DT-01															
EQT 0173 DT-03															
EQT 0174 DT-05															
EQT 0176 DT-07															
EQT 0181 DT-10															
EQT 0183 DT-12															
EQT 0186 DT-16															
EQT 0187 DT-17															
EQT 0189 DT-19															
EQT 0190 DT-20															
EQT 0192 DT-24															
EQT 0193 DT-25															
EQT 0196 DT-29															
EQT 0198 DT-30B															
													0.04	7.29	0.19

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007

Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

CO		NOx			PM10			SO2			VOC		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year										
Nitroparaffins Derivatives Plant and Related Units													
EQT 0200 01-32										0.86	22.22	3.78	
EQT 0201 01-35										0.03	0.62	0.15	
EQT 0204 G-44N										<0.01	<0.01	<0.01	
EQT 0205 G-44S										<0.01	<0.01	<0.01	
EQT 0207 G-46										0.13	16.16	0.57	
EQT 0208 G-67										0.13	16.16	0.56	
EQT 0209 G-79										0.18	16.16	0.81	
EQT 0210 G-81										0.14	17.00	0.60	
EQT 0211 HF-14										<0.01	0.05	0.01	
EQT 0212 HT-04										<0.01	11.63	<0.01	
EQT 0213 HT-08										0.04	1.27	0.18	
EQT 0214 HT-09										0.10	1.27	0.42	
EQT 0216 RL-01												21.29	
EQT 0217 UG-11	0.02	0.03	0.08	0.01	0.02	0.06	<0.01	0.01	<0.01	0.01	<0.01	0.01	
EQT 0218 UR-01	3.91	5.86	17.12	6.05	9.07	26.49	0.56	0.83	2.43	0.06	0.10	0.28	
EQT 0219 WL-01												176.90	
EQT 0220 XK-01												45.86	
EQT 0221 XK-02												26.02	
EQT 0222 X-01										<0.01	<0.01	<0.01	
EQT 0223 X-02A										0.10	9.42	0.44	
EQT 0224 X-02B										0.10	9.42	0.44	
EQT 0226 X-04B										0.05	-5.90	0.23	
EQT 0227 X-05A										0.21	8.04	0.91	

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007

Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Nitroparaffins Derivatives Plant and Related Units															
EQT 0228 XT-098													0.21	8.04	0.91
EQT 0229 XT-09C													0.24	6.40	1.03
EQT 0230 XT-10													0.19	0.79	0.85
EQT 0231 XT-113													0.16	6.28	0.71
EQT 0232 XT-115													0.54	2.79	2.38
EQT 0233 XT-133													0.36	2.83	1.58
EQT 0234 XT-134													0.25	1.76	1.09
EQT 0235 XT-14													0.01	0.09	0.04
EQT 0236 XT-15													0.17	7.39	0.74
EQT 0237 XT-17													0.07	9.42	0.31
EQT 0238 XT-36													0.05	0.38	0.24
EQT 0239 XT-37													0.06	0.75	0.27
EQT 0248 F-42													0.05	0.31	0.19
EQT 0277 DE-26	0.29	2.83	1.26	2.93	50.52	12.84				0.002	0.003	0.01	0.44	11.21	1.93
EQT 0279 CT-22													0.17	24.45	0.73
FUG 0003 F-7													0.17	0.26	0.77
FUG 0004 F-7C													1.28	1.92	5.62
FUG 0005 F-7D													6.99	10.49	30.63
FUG 0006 F-7S													0.08	0.12	0.35
GRP 0025 CAP-L1													0.63		2.76
RLP 0004 UF-06													0.01	0.01	0.03

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0092 BT-108	Methanol	0.16	123.21	0.68
EQT 0093 CD-10	Methanol	0.01	0.01	0.02
EQT 0094 CE-01	n-butyl alcohol	0.01	0.01	0.02
EQT 0096 CE-03	n-butyl alcohol	0.002	0.002	0.01
EQT 0097 CE-05	Methanol	0.002	0.002	0.01
EQT 0106 CG-01	n-butyl alcohol	<0.001	<0.001	<0.01
EQT 0107 CG-12	n-butyl alcohol	<0.001	<0.001	<0.01
EQT 0108 CG-23	n-butyl alcohol	0.07	1.28	0.33
EQT 0109 CG-32	Methanol	0.22	0.27	0.98
EQT 0111 CK-01	Methanol	0.01	74.62	0.05
EQT 0114 CT-02	Methanol	0.01	1.09	0.03
EQT 0115 CT-04	n-butyl alcohol	1.26	225.36	5.54
EQT 0118 CT-11	Methanol	0.03	0.31	0.12
EQT 0119 CT-14	Methanol	0.01	1.06	0.02
EQT 0120 CW-3	Chlorine	0.01	0.02	0.06
EQT 0121 DC-57	2-nitro-Propane	0.03	0.03	0.12
	Formaldehyde	0.13	0.16	0.59
	Methanol	0.01	0.01	0.02
EQT 0122 DE-03	Methanol	<0.001	<0.001	<0.01
EQT 0123 DE-04	Methanol	<0.001	<0.001	<0.01
EQT 0124 DE-05	Methanol	<0.001	<0.001	<0.01
EQT 0125 DE-09	Methanol	0.003	0.004	0.02
EQT 0126 DE-13	Methanol	0.02	0.02	0.08
EQT 0130 DE-19	Formaldehyde	0.02	1.32	0.09
	Methanol	<0.01	0.05	<0.01
EQT 0131 DE-20	Formaldehyde	0.02	3.64	0.08
	Methanol	0.01	9.16	0.05
EQT 0137 DF-12	Formaldehyde	<0.01	0.03	<0.01
	Methanol	<0.01	0.02	<0.01
	Triethyl amine	<0.01	0.02	<0.01
EQT 0142 DF-71	Ammonia	0.03	16.49	0.12
	Methanol	0.01	9.93	0.06
EQT 0143 DF-72	Methanol	<0.01	0.32	0.01

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0144 DF-73	Methanol	0.01	29.78	0.04
EQT 0145 DF-74	Formaldehyde	<0.001	<0.001	<0.01
	Methanol	0.002	0.002	0.01
EQT 0149 DF-87	Methanol	0.02	29.78	0.10
EQT 0152 DF-80A	Methanol	<0.01	0.42	0.01
EQT 0153 DF-80B	Methanol	<0.01	0.42	0.01
EQT 0154 DF-85	2-nitro-Propane	<0.01	0.01	<0.01
EQT 0155 DF-87	2-nitro-Propane	<0.001	0.003	<0.01
EQT 0156 DH-01	Formaldehyde	0.02	0.06	0.02
EQT 0158 DK-01	2-nitro-Propane	<0.01	0.01	<0.01
	Formaldehyde	<0.01	0.84	0.01
	Methanol	0.02	3.41	0.09
EQT 0159 DR-01	Formaldehyde	0.01	0.06	0.06
	Methanol	0.01	0.06	0.06
	Triethyl amine	0.07	0.27	0.33
EQT 0162 DR-03	Formaldehyde	0.01	0.09	0.06
	Methanol	0.01	0.04	0.04
EQT 0166 DR-06	Formaldehyde	0.04	0.30	0.16
	Methanol	0.01	2.82	0.05
EQT 0168 DR-08	Formaldehyde	0.01	0.01	0.03
	Methanol	<0.01	<0.01	<0.01
	Triethyl amine	0.14	0.17	0.61
EQT 0169 DR-10	2-nitro-Propane	0.04	1.37	0.17
EQT 0170 DT-01	Formaldehyde	<0.01	0.04	<0.01
	Methanol	<0.01	0.27	0.01
	Triethyl amine	<0.01	0.34	0.01
EQT 0173 DT-03	Methanol	0.27	9.93	1.17
EQT 0174 DT-05	2-nitro-Propane	<0.01	0.04	0.02
	Methanol	0.01	0.10	0.03
EQT 0176 DT-07	Formaldehyde	<0.01	0.02	<0.01
	Methanol	<0.01	0.02	<0.01
EQT 0183 DT-12	Formaldehyde	<0.01	0.02	<0.01
	Methanol	<0.01	0.02	<0.01

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0186 DT-16	Formaldehyde	<0.01	0.36	<0.01
	Methanol	<0.01	0.26	<0.01
EQT 0187 DT-17	2-nitro-Propane	<0.01	0.04	0.01
	Methanol	0.01	0.10	0.03
EQT 0189 DT-19	Formaldehyde	<0.01	0.05	0.01
	Methanol	<0.01	0.03	0.01
EOT 0192 DT-24	Formaldehyde	<0.001	0.02	<0.01
	Methanol	<0.01	0.02	<0.01
EOT 0194 DT-27	Sulfuric acid	<0.001	<0.001	<0.01
EOT 0195 DT-28	Sulfuric acid	<0.001	<0.001	<0.01
EOT 0196 DT-29	2-nitro-Propane	<0.01	0.03	0.02
	Methanol	0.01	0.08	0.04
EQT 0198 DT-308	Methanol	<0.01	0.32	0.02
EQT 0199 DT-31	Sulfuric acid	<0.001	<0.001	<0.01
EQT 0201 DT-35	2-nitro-Propane	<0.001	0.01	<0.01
EQT 0207 G-66	n-butyl alcohol	0.13	16.16	0.57
EQT 0208 G-67	n-butyl alcohol	0.13	16.16	0.56
EQT 0209 G-79	n-butyl alcohol	0.18	16.16	0.81
EQT 0210 G-81	n-butyl alcohol	0.13	16.16	0.58
EQT 0211 HF-14	n-butyl alcohol	0.002	0.05	0.01
EQT 0216 RL-01	Methanol		0.07	
EQT 0219 WL-01	Methanol		116.02	
EOT 0220 XK-01	Methanol		40.94	
EQT 0221 XK-02	Methanol		0.85	
EQT 0232 XT-115	Methanol	0.04	0.22	0.19
EOT 0238 XT-36	2-nitro-Propane	<0.001	0.002	<0.01
EOT 0239 XT-37	2-nitro-Propane	<0.001	0.004	<0.01
EOT 0248 F-42	Methanol	0.02	0.11	0.07
EOT 0276 DT-55	Sulfuric acid	<0.001	<0.001	<0.01
EOT 0277 DF-26	Methanol	0.26	7.90	1.13
EOT 0279 CT-22	Methanol	0.17	24.45	0.73
FUG 0003 F-7	Formaldehyde	0.17	0.26	0.76
	Methanol	<0.01	<0.01	0.01

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
FUG 0004 F-7C	Methanol	0.22	0.32	0.95
	n-butyl alcohol	0.38	0.57	1.65
FUG 0005 F-7D	Methanol	1.95	2.93	8.55
FUG 0006 F-7S	Methanol	0.02	0.03	0.10
GRP 0025 CAP-L1	Methanol	0.10		0.45
RLP 0004 UF-06	Ammonia	0.002	0.003	0.01
	Methanol	0.01	0.01	0.02
UNF 0002 NPD	2-nitro-Propane			0.34
	Ammonia			0.13
	Chlorine			0.06
	Formaldehyde			1.87
	Methanol			16.07
	Sulfuric acid			<0.01
	Triethyl amine			0.95
	n-butyl alcohol			10.08

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0092 BT-108 - Waste Alcohol Tank

- 1 [40 CFR 63.123(a)]
Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
- 2 [40 CFR 63.247(f)]
Equip with a submerged fill pipe.
- 3 [LAC 33.III.2103.A]
- 4 [LAC 33.III.2103.f]
Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33.III.2103.1.1 - 7, as applicable.
- 5 [LAC 33.III.5109.A]
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0093 CD-10 - Centrifuge

- 6 [LAC 33.III.5109.A]
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0094 CE-01 - Butanol Column System

- 7 [LAC 33.III.5109.A]
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0096 CE-03 - Butanol Stripper System

- 8 [LAC 33.III.5109.A]
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0097 CE-05 - Stripper System

- 9 [40 CFR 63.2455]
40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.
40 CFR 63 Subpart FFFF. TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]
Temperature <= 100 F (State Only).
Which Months: All Year Statistical Basis: None specified
Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the condenser operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.
- 10 [40 CFR 63.2525(a)]
- 11 [LAC 33.III.501.C.6]
- 12 [LAC 33.III.501.C.6]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

EQT 0097 CE-05 - Stripper System

13 [LAC 33:III.501.C.6] Temperature monitored by temperature monitoring device continuously. Monitor exhaust temperature and time observed continuously (State Only).

Which Months: All Year Statistical Basis: None specified
 Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only).
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0100 CF-13 - Extraction Tank

16 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0105 CF-16 - Surge Tank System

17 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0106 CG-01 - TA Crystallizer System

18 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0107 CG-12 - Mother Liquor Evaporator System

19 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0108 CG-23 - Flame Arrestor for CF-13, CF-14, and CF-15

20 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0109 CG-32 - TAUP Dryer System

21 [40 CFR 63.2455] 40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0109 CG-32 - TAUP Dryer System

- 22 [40 CFR 63.2520(a)] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Comply with the applicable reports specified in 40 CFR 63.2525(d). [40 CFR 63.2520(a)]
Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63. [40 CFR 63.2525(a)]
Temperature <= 100 F (State Only)
Which Months: All Year Statistical Basis: None specified
Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only)
Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the condenser operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.
Temperature monitored by temperature monitoring device continuously. Monitor exhaust temperature and time observed continuously (State Only)
Which Months: All Year Statistical Basis: None specified
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0110 CJ-59 - Delumper Pneumatic System Dust Filter

- 29 [LAC 33.III.5109.A] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
Which Months: All Year Statistical Basis: Six-minute average
Particulate matter (10 microns or less) > 99 % removal efficiency from filter manufacturer's certification.
Which Months: All Year Statistical Basis: None specified
Baghouses: Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of inspection. Keep records of maintenance inspections on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.
Filter vents: Visible emissions recordkeeping by electronic or hard copy daily. Keep records of visible emission checks on site and available for inspection by the Office of Environmental Compliance, Surveillance Division
Baghouses (including gaskets): Equipment/operational data monitored by technically sound method semiannually or whenever visible emission checks indicate maintenance may be necessary. Change elements as necessary.
Which Months: All Year Statistical Basis: None specified
Filter vents: Visible emissions monitored by visual inspection/determination daily. If visible emissions are observed, restore operation of the filter to its normal or usual manner of operation as expeditiously as practicable, but at a minimum within three working days, in accordance with good air pollution control practices for minimizing emissions
Which Months: All Year Statistical Basis: None specified

EQT 0111 CK-01 - Loading/Unloading (Tank Trucks)

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER2008007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0111 CK-01 - Loading/Unloading (Tank Trucks)

- 35 [40 CFR 63.2475] 40 CFR 63 Subpart FFFF. Group 2 Transfer Rack. Transfer Rack loads less than 171,700 gal/yr of organic liquids containing HAPs with a rack-weighted average partial pressure greater than or equal to 1.5 psia, no controls required.
Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain applicable records in accordance with 40 CFR 63.2525.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0112 CR-01 - Crystallizer

- 38 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0113 CR-02 - Crystallizer

- 39 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0114 CT-02 - TA Solution Tank

- 40 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0115 CT-04 - Butanol Tank

- 41 [LAC 33:III.2103.A] Equip with a submerged fill pipe.
Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0118 CT-11 - Mother Liquor Receiver

- 44 [40 CFR 63.123(a)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
Equip with a submerged fill pipe.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0118 CT-11 - Mother Liquor Receiver

47 [LAC 33:III.2103.1]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable.

48 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0119 CT-14 - TA Solution Tank

49 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0120 CW-3 - Cooling Tower 3

50 [40 CFR 63.2490]

Comply with the requirements of 40 CFR 63.104 (Subpart F of Part 63) and the requirements referenced therein, except as specified in 40 CFR 63.2490

51 [40 CFR 63.2525]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS UU, WW, and GGG of this part 63.

52 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0121 DC-57 - Condenser for DR-05 (reactor) and DT-18 (tank)

53 [40 CFR 63.2455]

40 CFR 63 Subpart FFFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

54 [40 CFR 63.2525(a)]

TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculations. [40 CFR 63.2525(a)]

55 [LAC 33:III.501.C.6]

Submit report Due annually, by the 31st of March for the preceding calendar year. List the hours that the condenser operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.

56 [LAC 33:III.501.C.6]

Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only). Temperature monitored by temperature monitoring device continuously. Monitor exhaust temperature and time observed continuously (State Only).

57 [LAC 33:III.501.C.6]

Which Months: All Year Statistical Basis: None specified Temperature <= 150 F (State Only). Which Months: All Year Statistical Basis: None specified

58 [LAC 33:III.501.C.6]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Condenser with 95% control efficiency for DR-05 (Condensation Reactor) and DT-18 (Reactor Hold Tank).

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER200080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT-0122 DE-03 - AMP Refining Column System

Specific QA/QC Procedures: Calibrate, operate, and maintain instrumentation using procedures that take into account manufacturer's

specifications. [40 CFR 64.3(b)(3)]
Equipment/operational data monitored by technically sound method continuously. Monitor outlet gas temperature. [40 CFR 64.6(c)(1)]

Which Months: All Year Statistical Basis: None specified

An excursion or exceedance is defined as an outlet gas temperature measurement greater than 180 °F. [40 CFR 64.6(c)(2)]

Submit Notification: Submit to DEQ within 5 working days upon the establishment or reestablishment of any exceedance or excursion level, for purposes of responding to and reporting excursions or excursions under 40 CFR 64.7 and 64.8. [40 CFR 64.6(c)(2)]

Conduct the monitoring required under 40 CFR 64 upon issuance of a part 70 or 71 permit that includes such monitoring, or by such later date specified in the permit pursuant to 40 CFR 64.6(d). [40 CFR 64.7(a)]

Maintain the monitoring required under 40 CFR 64 at all times, including but not limited to maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64.7(b)]

Conduct all monitoring required under 40 CFR 64 in continuous operation (or collect data at all required intervals) at all times that the pollutant specific emissions unit is operating, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments). Do not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of 40 CFR 64, including data averages and calculations, or for fulfilling a minimum data availability requirement, if applicable. Use all the data collected during all other periods in assessing the operation of the control device and associated control system. [40 CFR 64.7(c)]

Restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable upon detecting an excursion or exceedance, in accordance with good air pollution control practices for minimizing emissions. Minimize the period of any startup, shutdown or malfunction, and take any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). [40 CFR 64.7(d)(1)]

Submit written notification: Due to the Office of Environmental Compliance within 72 hours upon identifying a failure to achieve compliance with the outlet gas temperature standard for which, after approval of monitoring under 40 CFR 64, the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing documents a need to modify the existing indicator ranges or designated conditions. If necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. [40 CFR 64.7(e)]

The number of temperature excursions above 5 percent of operation hours is the threshold limit of excursions or exceedances at which implementation of a QIP is required. [40 CFR 64.8(a)]

Submit report: Due on and after the date specified in 40 CFR 64.7(a) by which the owner or operator must use monitoring that meets the requirements of 40 CFR 64. Submit monitoring reports to the DEQ in accordance with 40 CFR 70.6(a)(3)(ii). Include in a report for monitoring under 40 CFR 64, at a minimum, the information required under 40 CFR 70.6(a)(3)(ii) and the information specified in 40 CFR 64.9(a)(2)(i) through (a)(2)(iii), as applicable. [40 CFR 64.9(a)]

60 [40 CFR 64.3(b)(3)]

61 [40 CFR 64.6(c)(1)]

62 [40 CFR 64.6(c)(2)]

63 [40 CFR 64.6(c)(2)]

64 [40 CFR 64.7(a)]

65 [40 CFR 64.7(b)]

66 [40 CFR 64.7(c)]

67 [40 CFR 64.7(d)(1)]

68 [40 CFR 64.7(e)]

69 [40 CFR 64.8(a)]

70 [40 CFR 64.9(a)]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0122 DE-03 - AMP Refining Column System

71 [40 CFR 64.9(b)(1)]

Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Maintain records of monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]

72 [40 CFR 64.9(b)(1)]

Monitoring data recordkeeping by electronic or hard copy continuously. Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]

73 [40 CFR 64.9(b)(1)]

Comply with the recordkeeping requirements specified in 40 CFR 70.6(a)(3)(ii). [40 CFR 64.9(b)(1)]

74 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0123 DE-04 - AX Refining Column System

75 [40 CFR 63.2455]

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

76 [40 CFR 63.2525(a)]

40 CFR 63 Subpart FFFF. TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]

77 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0124 DE-05 - General Purpose Column System

78 [40 CFR 64.3(b)(3)]

Specific QA/QC Procedures: Calibrate, operate, and maintain instrumentation using procedures that take into account manufacturer's specifications. [40 CFR 64.3(b)(3)]

79 [40 CFR 64.6(c)(1)]

Equipment/operational data monitored by technically sound method continuously. Monitor outlet gas temperature. [40 CFR 64.6(c)(1)]

80 [40 CFR 64.6(c)(2)]

Which Months: All Year Statistical Basis: None specified An excursion or exceedance is defined as an outlet gas temperature measurement greater than 150 °F. [40 CFR 64.6(c)(2)]

81 [40 CFR 64.6(c)(2)]

Submit Notification: Submit to DEQ within 5 working days upon the establishment or reestablishment of any exceedance or excursion level, for purposes of responding to and reporting exceedances or excursions under 40 CFR 64.7 and 64.8. [40 CFR 64.6(c)(2)]

82 [40 CFR 64.7(a)]

Conduct the monitoring required under 40 CFR 64 upon issuance of a part 70 or 71 permit that includes such monitoring, or by such later date specified in the permit pursuant to 40 CFR 64.6(d). [40 CFR 64.7(a)]

83 [40 CFR 64.7(b)]

Maintain the monitoring required under 40 CFR 64 at all times, including but not limited to maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64.7(b)]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0092 BT-108 - Waste Alcohol Tank

1 [40 CFR 63.123(a)]

- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

Equip with a submerged fill pipe.

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33.III.2103.I.1 - 7, as applicable.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0093 CD-10 - Centrifuge

- 2 [40 CFR 63.2470]
- 3 [LAC 33.III.2103.A]
4 [LAC 33.III.2103.I]
- 5 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0094 CE-01 - Butanol Column System

- 6 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0096 CE-03 - Butanol Stripper System

- 7 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0097 CE-05 - Stripper System

- 9 [40 CFR 63.2455]

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.
40 CFR 63 Subpart FFFF. TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]
Temperature \leq 100 F (State Only).

Which Months: All Year Statistical Basis: None specified
Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the condenser operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0097 CE-05 - Stripper System

13 [LAC 33:III.501.C.6]

Temperature monitored by temperature monitoring device continuously. Monitor exhaust temperature and time observed continuously (State Only).

Which Months: All Year Statistical Basis: None specified

Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only).

14 [LAC 33:III.501.C.6]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

15 [LAC 33:III.5109.A]

Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0100 CF-13 - Extraction Tank

16 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

17 [LAC 33:III.5109.A]

Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0105 CF-16 - Surge Tank System

18 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0106 CG-01 - TA Crystallizer System

19 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0107 CG-12 - Mother Liquor Evaporator System

20 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0108 CG-23 - Flame Arrestor for CF-13, CF-14, and CF-15

21 [40 CFR 63.245S]

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

EQT 0109 CG-32 - TAUP Dryer System

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER2008007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0109 CG-32 - TAUP Dryer System

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Comply with the applicable reports specified in 40 CFR 63.2520(a). [40 CFR 63.2520(a)]
Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63. [40 CFR 63.2525(a)]

- 24 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only). Temperature <= 100 F (State Only).
25 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only). Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the condenser operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.
26 [LAC 33:III.501.C.6] Temperature monitored by temperature monitoring device continuously. Monitor exhaust temperature and time observed continuously (State Only).
27 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

- 28 [LAC 33:III.5109.A]

EQT 0110 CJ-59 - Delumper Pneumatic System Dust Filter

- 29 [LAC 33:III.1311.C] Opacity <= 20 percent, except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
Which Months: All Year Statistical Basis: Six-minute average Particulate matter (10 microns or less) >= 99 % removal efficiency from filter manufacturer's certification.
30 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified Baghouses: Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of inspection. Keep records of maintenance inspections on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.
31 [LAC 33:III.501.C.6] Filter vents: Visible emissions recordkeeping by electronic or hard copy daily. Keep records of visible emission checks on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.
32 [LAC 33:III.501.C.6] Baghouses (including gasket(s)): Equipment/operational data monitored by technically sound method semiannually or whenever visible emission checks indicate maintenance may be necessary. Change elements as necessary.
Which Months: All Year Statistical Basis: None specified
33 [LAC 33:III.501.C.6] Filter vents: Visible emissions monitored by visual inspection/determination daily. If visible emissions are observed, restore operation of the filter to its normal or usual manner of operation as expeditiously as practicable, but at a minimum within three working days, in accordance with good air pollution control practices for minimizing emissions.
Which Months: All Year Statistical Basis: None specified

EQT 0111 CK-01 - Loading/Unloading (Tank Trucks)

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0111 CK-01 - Loading/Unloading (Tank Trucks)

- 35 [40 CFR 63.2475] 40 CFR 63 Subpart FFFF. Group 2 Transfer Rack. Transfer Rack loads less than 171,700 gal/yr of organic liquids containing HAPs with a rack-weighted average partial pressure greater than or equal to 1.5 psia, no controls required.
Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain applicable records in accordance with 40 CFR 63.2525.
- Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0112 CR-01 - Crystallizer

- 38 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0113 CR-02 - Crystallizer

- 39 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0114 CT-02 - TA Solution Tank

- 40 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0115 CT-04 - Butanol Tank

- 41 [LAC 33:III.2103.A] Equip with a submerged fill pipe.
Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable.
- Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0118 CT-11 - Mother Liquor Receiver

- 44 [40 CFR 63.123(a)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
- 40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
- 45 [40 CFR 63.2470] Equip with a submerged fill pipe.
- 46 [LAC 33:III.2103.A]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-VS

Air - Title V Regular Permit Renewal

EQT 0118 CT-11 - Mother Liquor Receiver

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC

33:III.2103.I.1 - 7, as applicable.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0119 CT-14 - TA Solution Tank

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0120 CW-3 - Cooling Tower 3

Comply with the requirements of 40 CFR 63.104 (Subpart F of Part 63) and the requirements referenced therein, except as specified in 40 CFR 63.2490.

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS UU, WW, and GGG of this part 63.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0121 DC-57 - Condenser for DR-05 (reactor) and DT-18 (tank)

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]

Continuous Process Vent. Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the condenser operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.

Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only). Temperature monitored by temperature monitoring device continuously. Monitor exhaust temperature and time observed continuously (State Only).

Which Months: All Year Statistical Basis: None specified Temperature <= 150 F (State Only). Which Months: All Year Statistical Basis: None specified

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Condenser with 95% control efficiency for DR-05 (Condensation Reactor) and DT-18 (Reactor Hold Tank).

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0122 DE-03 - AMP Refining Column System

- Specific QA/QC Procedures: Calibrate, operate, and maintain instrumentation using procedures that take into account manufacturer's specifications. [40 CFR 64.3(b)(3)]
- Equipment/operational data monitored by technically sound method continuously. Monitor outlet gas temperature. [40 CFR 64.6(c)(1)]
- Which Months: All Year Statistical Basis: None specified
- An excursion or exceedance is defined as an outlet gas temperature measurement greater than 180 °F. [40 CFR 64.6(c)(2)]
- Submit Notification: Submit to DEQ within 5 working days upon the establishment or reestablishment of any exceedance or excursion level, for purposes of responding to and reporting exceedances or excursions under 40 CFR 64.7 and 64.8. [40 CFR 64.6(c)(2)]
- Conduct the monitoring required under 40 CFR 64 upon issuance of a part 70 or 71 permit that includes such monitoring, or by such later date specified in the permit pursuant to 40 CFR 64.6(d). [40 CFR 64.7(a)]
- Maintain the monitoring required under 40 CFR 64 at all times, including but not limited to maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64.7(b)]
- Conduct all monitoring required under 40 CFR 64 in continuous operation (or collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments). Do not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of 40 CFR 64, including data averages and calculations, or for fulfilling a minimum data availability requirement, if applicable. Use all the data collected during all other periods in assessing the operation of the control device and associated control system. [40 CFR 64.7(c)]
- Restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as practicable upon detecting an excursion or exceedance, in accordance with good air pollution control practices for minimizing emissions. Minimize the period of any startup, shutdown or malfunction, and take any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). [40 CFR 64.7(d)(1)]
- Submit written notification: Due to the Office of Environmental Compliance within 72 hours upon identifying a failure to achieve compliance with the outlet gas temperature standard for which, after approval of monitoring under 40 CFR 64, the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions. If necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. [40 CFR 64.7(e)]
- The number of temperature excursions above 5 percent of operation hours is the threshold limit of excursions or exceedances at which implementation of a QIP is required. [40 CFR 64.8(a)]
- Submit report: Due on and after the date specified in 40 CFR 64.7(a) by which the owner or operator must use monitoring that meets the requirements of 40 CFR 64. Submit monitoring reports to the DEQ in accordance with 40 CFR 70.6(a)(3)(iii). Include in a report for monitoring under 40 CFR 64, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the information specified in 40 CFR 64.9(a)(2)(i) through (a)(2)(iii), as applicable. [40 CFR 64.9(a)]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0122 DE-03 - AMP Refining Column System

- 71 [40 CFR 64.9(b)(1)]
72 [40 CFR 64.9(b)(1)]
73 [40 CFR 64.9(b)(1)]
74 [LAC 33.III.S109.A]

Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Maintain records of monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]

Monitoring data recordkeeping by electronic or hard copy continuously. Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]
Comply with the recordkeeping requirements specified in 40 CFR 70.6(a)(3)(ii). [40 CFR 64.9(b)(1)]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT Requirements apply.

EQT 0123 DE-04 - AX Refining Column System

- 75 [40 CFR 63.245]
76 [40 CFR 63.255(a)]
77 [LAC 33.III.S109.A]

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

40 CFR 63 Subpart FFFF. TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalibration. [40 CFR 63.2525(a)]
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT Requirements apply.

EQT 0124 DE-05 - General Purpose Column System

- 78 [40 CFR 64.3(b)(3)]
79 [40 CFR 64.6(c)(1)]
80 [40 CFR 64.6(c)(2)]
81 [40 CFR 64.6(c)(2)]
82 [40 CFR 64.7(a)]
83 [40 CFR 64.7(b)]

Specific QA/QC Procedures: Calibrate, operate, and maintain instrumentation using procedures that take into account manufacturer's specifications. [40 CFR 64.3(b)(3)]
Equipment/operational data monitored by technically sound method continuously. Monitor outlet gas temperature. [40 CFR 64.6(c)(1)]
Which Months: All Year Statistical Basis: None specified An excursion or exceedance is defined as an outlet gas temperature measurement greater than 150 °F. [40 CFR 64.6(c)(2)]
Submit Notification: Submit to DEQ within 5 working days upon the establishment or reestablishment of any exceedance or excursion level, for purposes of responding to and reporting exceedances or excursions under 40 CFR 64.7 and 64.8. [40 CFR 64.6(c)(2)]
Conduct the monitoring required under 40 CFR 64 upon issuance of a part 70 or 71 permit that includes such monitoring, or by such later date specified in the permit pursuant to 40 CFR 64.6(d). [40 CFR 64.7(a)]
Maintain the monitoring required under 40 CFR 64 at all times, including but not limited to maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64.7(b)]

SPECIFIC REQUIREMENTS

AIID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0124 DE-05 - General Purpose Column System

84 [40 CFR 64.7(c)]

Conduct all monitoring required under 40 CFR 64 in continuous operation (or collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments). Do not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of 40 CFR 64, including data averages and calculations, or for fulfilling a minimum data availability requirement, if applicable. Use all the data collected during all other periods in assessing the operation of the control device and associated control system. [40 CFR 64.7(c)]

85 [40 CFR 64.7(d)(1)]

Restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable upon detecting an excursion or exceedance, in accordance with good air pollution control practices for minimizing emissions. Minimize the period of any startup, shutdown or malfunction, and take any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). [40 CFR 64.7(d)(1)]

86 [40 CFR 64.7(e)]

Submit written notification: Due to the Office of Environmental Compliance within 72 hours upon identifying a failure to achieve compliance with the outlet gas temperature standard for which, after approval of monitoring under 40 CFR 64, the approved monitoring did not provide an indication of an excursion or exceedance, while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions. If necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. [40 CFR 64.7(e)]

87 [40 CFR 64.8(a)]

The number of temperature excursions above 5 percent of operation hours is the threshold limit of excursions or exceedances at which implementation of a QIP is required. [40 CFR 64.8(a)]
Submit report: Due on and after the date specified in 40 CFR 64.7(a) by which the owner or operator must use monitoring that meets the requirements of 40 CFR 64. Submit monitoring reports to the DEQ in accordance with 40 CFR 70.6(a)(3)(iii). Include in a report for monitoring under 40 CFR 64, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the information specified in 40 CFR 64.9(a)(2)(i) through (a)(2)(iii), as applicable. [40 CFR 64.9(a)]

88 [40 CFR 64.9(a)]

Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Maintain records of monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Maintain these records for a period of at least five years [40 CFR 64.9(b)(1)]

89 [40 CFR 64.9(b)(1)]

Comply with the recordkeeping requirements specified in 40 CFR 70.6(a)(3)(ii). [40 CFR 64.9(b)(1)]
Monitoring data recordkeeping by electronic or hard copy continuously. Maintain these records for a period of at least five years. [40 CFR 64.9(b)(1)]
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0125 DE-09 - TA Stripper System

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER2008007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0125 DE-09 - TA Stripper System

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0126 DE-13 - Methanol Finishing Column System

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0127 DE-14 - AMP/Methanol Stripper Column System

40 CFR 63 Subpart FFFF. Group 2 continuous process vent TRE index >1.9 , but ANGUS elects to classify this vent as a Group 1 vent and route to flare system, Emission Point No. DE-26.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0128 DE-15 - Dehydration Column System

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0129 DE-16 - AMP Refining Column System

- 104 [40 CFR 63.2455] 40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.
- 105 [40 CFR 63.2525(a)] TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]
- 106 [LAC 33:III 5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0130 DE-19 - Formaldehyde Scrubber for DT-13 and DT-14

- 107 [LAC 33:III.501.C.6] Flow rate recordkeeping by electronic or hard copy once every four hours (State Only).
- 108 [LAC 33:III.501.C.6] Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.
- 109 [LAC 33:III.501.C.6] Flow rate monitored by flow rate monitoring device once every four hours (State Only).
- 110 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified
- 111 [LAC 33:III.5109.A] Flow rate >= 0.50 gallons/min (State Only)
- 112 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified
- 113 [LAC 33:III.501.C.6] Flow rate monitored by flow rate monitoring device once every four hours (State Only).
- 114 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified
- 115 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified
- 116 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Scrubber with 95% control efficiency for Emission Points DT-13 and DT-14 determined as MACT.

EQT 0131 DE-20 - Vent Scrubber for Amines Check Tanks

- 112 [LAC 33:III.501.C.6] Flow rate recordkeeping by electronic or hard copy once every four hours (State Only).
- 113 [LAC 33:III.501.C.6] Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.
- 114 [LAC 33:III.501.C.6] Flow rate >= 0.50 gallons/min (State Only).
- 115 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified
- 116 [LAC 33:III.5109.A] Which Months: All Year Statistical Basis: None specified
- 117 [LAC 33:III.501.C.6] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Scrubber with 70% control efficiency for DF-17A, DF-17B, DF-21, DF-25, DF-27, DF-28, DF-29, DF-30, DF-31, DF-36, DF-86 determined as MACT.

EQT 0134 DF-06A - GA Autoclave Settling Tank

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0134 DF-06A - GA Autoclave Settling Tank

- 117 [40 CFR 63.2460] 40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.
- 118 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0135 DF-06B - GA Autoclave Settling Tank

- 119 [40 CFR 63.2460] 40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.
- 120 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0136 DF-07 - Spent Catalyst Tank

- 121 [40 CFR 63.2460] 40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.
- 122 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0137 DF-12 - Nitro Alcohol Transfer Tank

- 123 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. No additional controls determined as MACT.

EQT 0138 DF-48A - TA Settling Tank

- 124 [40 CFR 63.2460] 40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.
- 125 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0139 DF-48B - TA Settling Tank

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0139 DF-48B - TA Settling Tank

126 [40 CFR 63.2460]

40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26. Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0140 DF-56A - AMP Settling Tank

128 [40 CFR 63.2460]

40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26. Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0141 DF-56B - AMP Settling Tank

129 [LAC 33:III.5109.A]

40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26. Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0143 DF-72 - ZT-55/Morpholine Storage Tank

130 [40 CFR 63.2460]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons. Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0145 DF-74 - Falling Film Evaporator Separator System

135 [LAC 33:III.501.C.6]

136 [LAC 33:III.501.C.6]

Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only). Temperature <= 125 F. The maximum temperature is based on heat and material balances, as no historical information exists. The maximum temperature will be verified during the next campaign that this equipment is utilized (State Only). Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0145 DF-74 - Falling Film Evaporator Separator System

- Temperature monitored by temperature monitoring device continuously. Monitor exhaust temperature and time observed continuously (State Only).
Which Months: All Year Statistical Basis: None specified
Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the condenser operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vapor Recovery System with > 96% control efficiency determined as MACT.

EQT 0146 DF-78A - AMP Autoclave Catalyst Settling Tank

- 40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only, must meet ambient air standards; No MACT requirements apply.

EQT 0147 DF-78B - AMP Autoclave Catalyst Settling Tank

- 40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only, must meet ambient air standards; No MACT requirements apply.

EQT 0152 DF-90A - Oxazolidine Storage Tank

- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

EQT 0153 DF-90B - Oxazolidine Storage Tank

- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007
 Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

EQT 0153 DF-90B - Oxazolidine Storage Tank

147 [40 CFR 63.2470] 40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

EQT 0154 DF-95 - IPHA Dilution Tank

148 [LAC 33.III.501.C.6] Hydrogen <= 12.66 tons/yr.
 Which Months: All Year Statistical Basis: Annual maximum
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 No additional control determined as MACT.

149 [LAC 33.III.5109.A]

EQT 0155 DF-97 - IPHA Blend Tank

150 [LAC 33.III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 No additional control determined as MACT.

EQT 0156 DH-01 - Hydraulic Conveyor

151 [LAC 33.III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: Six-minute average
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 No additional control determined as MACT.

152 [LAC 33.III.5109.A]

EQT 0157 DH-03 - Delumper/Conveyor system

153 [LAC 33.III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 Which Months: All Year Statistical Basis: Six-minute average

EQT 0158 DK-01 - Loading/Unloading (Tank Trucks & Drums)

154 [40 CFR 63.2475] 40 CFR 63 Subpart FFFF. Group 2 Transfer Rack. Transfer Rack loads greater than 171,700 gal/yr of organic liquids containing HAPs with a rack-weighted average partial pressure less than or equal to 1.5 psia, no controls required.
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain applicable records in accordance with 40 CFR 63.2525.
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
 Formaldehyde is present only as an impurity in other products that are being loaded. No additional control determined as MACT.

155 [40 CFR 63.2525]

156 [LAC 33.III.5109.A]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER2008007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0159 DR-01 - Condensation Reactor

i57 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0160 DR-02A - GA Hydrogenation Autoclave

158 [40 CFR 63.2460]

40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.

159 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0161 DR-02B - GA Hydrogenation Autoclave

160 [40 CFR 63.2460]

40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.

161 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0162 DR-03 - Condensation Reactor

i62 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0163 DR-04A - TA Hydrogenation Autoclave

163 [40 CFR 63.2460]

40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.

164 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0164 DR-04B - AMP Autoclave

165 [40 CFR 63.2460]

40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System, Emission Point No. DE-26.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0164 DR-04B - AMP Autoclave

166 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0165 DR-05 - Condensation Reactor

167 [40 CFR 63.2455]

40 CFR 63 Subpart FFFF. Group 2 continuous process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent. Subpart FFFF.

168 [40 CFR 63.2525(a)]

TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]

169 [LAC 33:III.2115.A]

Nonhalogenated hydrocarbon burning: Temperature $\geq 1300\text{ F}$ (704 degrees C) for 0.3 second or greater in a direct-flame afterburner or an equally effective device which achieves a removal efficiency of 95 percent or greater, as determined in accordance with LAC 33:III.2115.J.1, or if emissions are reduced to 50 ppm by volume, whichever is less stringent. Equipped with DC-57 Condenser with 95% control efficiency.

170 [LAC 33:III.2115.I]

Which Months: All Year Statistical Basis: None specified
Determine compliance with LAC 33:III.2115.A through G by applying the test methods specified in LAC 33:III.2115.I.1 through 5, as appropriate.

171 [LAC 33:III.2115.J.1]

Demonstrate compliance with LAC 33:III.2115 as requested by DEQ.
Install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications. Monitor and record at a minimum the parameters listed in LAC 33:III.2115.J.2.a through e.

172 [LAC 33:III.2115.J.2]

Comply with LAC 33:III.2115 as soon as practicable, but in no event later than one year from the promulgation of the regulation revision, if subject to LAC 33:III.2115.J.2.a through e.

173 [LAC 33:III.2115.J]

33:III.2115 as soon as practicable, but in no event later than August 20, 2003. Comply with the requirements of LAC 33:III.2115.K.1 through K.3 as a result of a revision of LAC 33:III.2115.

174 [LAC 33:III.2115.K]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.K.1 through K.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.

175 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
DC-57 Condenser with 95% control efficiency determined as MACT.

EQT 0166 DR-06 - General Purpose Reactor

176 [40 CFR 63.2460]

Group 2 batch process vent. Vent is not associated with production of a product or intermediate for which collective uncontrolled organic HAP emissions from all batch process vents is $\geq 10,000\text{ lbs/yr}$, no controls require. Subpart FFFF.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0167 DR-07 - AMP Autoclave

178 [40 CFR 63.2460]

40 CFR 63 Subpart FFFF. Group 1 batch process vent. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by greater than 95 percent by weight from a sufficient number of vents through a closed-vent system to any combination of control devices. Tank vents to the NPD Flare System. Emission Point No. DE-26. Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0168 DR-09 - Condensation Reactor System

180 [40 CFR 63.2460]

Group 2 batch process vent. Vent is not associated with production of a product or intermediate for which collective uncontrolled organic HAP emissions from all batch process vents is \geq 10,000 lbs/yr, no controls required. Subpart FFFF. Temperature \leq 125 F (State Only).

Which Months: All Year Statistical Basis: None specified

Temperature recordkeeping by electronic or hard copy continuously. Record exhaust temperature and time observed (State Only). Monitor exhaust temperature and time observed continuously (State Only). Temperature monitored by temperature monitoring device continuously. Monitor exhaust temperature and time observed continuously (State Only).

Which Months: All Year Statistical Basis: None specified

Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the condenser operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Condenser with > 98% control efficiency for condensation reactor determined as MACT.

EQT 0169 DR-10 - IPHA Reactor

186 [40 CFR 63.2460]

40 CFR 63 Subpart FFFF. Group 2 batch process vent. Vent is not associated with production of a product or intermediate for which collective uncontrolled organic HAP emissions from all batch process vents is \geq 10,000 lbs/yr, no controls required. Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS UU, WW, and GGG of this part 63.

187 [40 CFR 63.2525]

Hydrogen \leq 1.52 tons/yr. Which Months: All Year Statistical Basis: Annual maximum Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. No additional control determined as MACT.

EQT 0170 DT-01 - Nitro/Alcohol Storage Tank

188 [LAC 33:III.501.C.6] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0170 DT-01 - Nitro/Alcohol Storage Tank

191 [40 CFR 63.2470] 40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0172 DT-02B - Crude TA Storage

193 [40 CFR 63.2470] 40 CFR 63 Subpart FFFF. Group 1 Surge Control Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.

Equip with a submerged fill pipe.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0174 DT-05 - NMP Storage

196 [40 CFR 63.123(a)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]

197 [40 CFR 63.2470] 40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0175 DT-06 - Crude AMP Storage

199 [40 CFR 63.2470] Group 1 Surge Control Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.

Equip with a submerged fill pipe.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0176 DT-07 - TN Feed Tank

202 [40 CFR 63.123(a)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]

40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0176 DT-07 - TN Feed Tank

204 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0177 DT-08A - Crude Methanol Storage Tank

40 CFR 63 Subpart FFFF. Group 1 Storage Tank. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.
Equip with a submerged fill pipe.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0178 DT-08C - Crude Methanol Storage Tank

40 CFR 63 Subpart FFFF. Group 1 Storage Tank. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.
Equip with a submerged fill pipe.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0179 DT-09A - Methanol Storage Tank

40 CFR 63 Subpart FFFF. Group 1 Storage Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.
Equip with a submerged fill pipe.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0180 DT-09B - Methanol Storage Tank

40 CFR 63 Subpart FFFF. Group 1 Storage Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.
Equip with a submerged fill pipe.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0181 DT-10 - AMP/AX Storage Tank

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
 Activity Number: PER20080007

Permit Number: 2011-V5
 Air - Title V Regular Permit Renewal

EQT 0181 DT-10 - AMP/AX Storage Tank

217 [LAC 33:III.2103.A] Equip with a submerged fill pipe.

EQT 0182 DT-11 - Recovered Methanol Tank

218 [40 CFR 63.2470] 40 CFR 63 Subpart FFFF. Group 1 Storage Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26. Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0183 DT-12 - TN Drum Out Tank

220 [40 CFR 63.123(e)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
 40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. No additional control determined as MACT.

EQT 0184 DT-13 - 50% Formaldehyde Tank

223 [40 CFR 63.2470] 40 CFR 63 Subpart FFFF. Group 2 Storage Tank. Tank volume is less than 10,000 gallons; no controls required.
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Vent routed to Formaldehyde Scrubber, Emission Point DE-19, with 95% control efficiency determined as MACT.

EQT 0185 DT-14 - 50% Formaldehyde Tank

225 [40 CFR 63.2470] 40 CFR 63 Subpart FFFF. Group 2 Storage Tank. Tank volume is less than 10,000 gallons; no controls required.
 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Vent routed to Formaldehyde Scrubber, Emission Point DE-19, with 95% control efficiency determined as MACT.

EQT 0186 DT-16 - TN Ion Exchange Feed Tank

227 [40 CFR 63.123(e)] Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
 40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0186 DT-16 - TN Ion Exchange Feed Tank

229 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0187 DT-17 - NMP Storage Tank

230 [40 CFR 63.123(a)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0188 DT-18 - Reactor Hold Tank

233 [40 CFR 63.123(a)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0189 DT-19 - TN Feed Tank

236 [40 CFR 63.123(a)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0191 DT-23 - Crude Amines Tank

239 [40 CFR 63.2470]

40 CFR 63 Subpart FFFF. Group 1 Surge Control Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.
Equip with a submerged fill pipe.

240 [LAC 33:III.5103.A]

SPECIFIC REQUIREMENTS

AIID: 1556 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
Air - Title V Regular Permit Renewal

EQT 0191 DT-23 - Crude Amines Tank

241 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0192 DT-24 - TN Feed Tank

242 [40 CFR 63.123(a)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]

243 [40 CFR 63.2470]

40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

244 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
No additional control determined as MACT.

EQT 0194 DT-27 - Sulfuric Acid Tank

245 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0195 DT-28 - Sulfuric Acid

246 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0196 DT-29 - NMP Truck Loading Tank

247 [40 CFR 63.123(a)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]

248 [40 CFR 63.2470]

40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.

249 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0197 DT-30A - Crude Methanol Storage Tank

250 [40 CFR 63.2470]

40 CFR 63 Subpart FFFF. Group 1 Surge Control Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26. Equip with a submerged fill pipe.

251 [LAC 33:III.2103.A]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

EQT 0197 DT-30A - Crude Methanol Storage Tank

252 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0198 DT-30B - ZT-55/Morpholine Tank

253 [40 CFR 63.123(a)]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]

40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Maximum true vapor pressure of total HAP is <1.0 psia.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0199 DT-31 - Sulfuric Acid Tank

256 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0200 DT-32 - Amine/AX Tank

257 [LAC 33:III.2103.A]
258 [LAC 33:III.2103.I]

Equip with a submerged fill pipe.
Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Maximum true vapor pressure of total HAP is <1.0 psia.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tanks stores HAPs only as an impurity. No additional control determined as MACT.

EQT 0201 DT-35 - IPHA Storage Tank

259 [40 CFR 63.123(a)]
260 [40 CFR 63.247(j)]
261 [LAC 33:III.5109.A]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Maximum true vapor pressure of total HAP is <1.0 psia.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tanks stores HAPs only as an impurity. No additional control determined as MACT.

EQT 0202 DT-36A - Crude AMP Storage Tank

262 [40 CFR 63.247(j)]

40 CFR 63 Subpart FFFF. Group 1 Surge Control Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
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EQT 0202 DT-36A - Crude AMP Storage Tank

- 263 [LAC 33:III.2103.A]
264 [LAC 33:III.2103.1]
265 [LAC 33:III.5109.A]

Equip with a submerged fill pipe.
Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0203 DT-36B - Crude AMP Storage Tank

- 266 [40 CFR 63.2470]
267 [LAC 33:III.2103.A]
268 [LAC 33:III.2103.1]
269 [LAC 33:III.5109.A]

40 CFR 63 Subpart FFFF. Group I Surge Control Vessel. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Tank vents to the NPD Flare System, Emission Point No. DE-26.
Equip with a submerged fill pipe.
Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0207 G-66 - Wet Butanol Tank

- 270 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0208 G-67 - Butanol Extraction Tank

- 271 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0209 G-79 - Water Phase Tank

- 272 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0210 G-81 - NPC Waste Tank

- 273 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0211 HF-14 - CE-03 Condensed Overheads Tank

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
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EQT 0211 HF-14 - CE-03 Condensed Overheads Tank

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0217 UG-11 - Hydrogen Plant Flare

Submit notification: Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC), as soon as possible after the start of burning of pressure valve releases for control over process upsets. Notify in accordance with LAC 33.I.3923. Notification is required only if the upset cannot be controlled in six hours.
Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets.

Which Months: All Year Statistical Basis: None specified
State Only. Presence of a flame recordkeeping by electronic or hard copy continuously.
State Only. Presence of a flame monitored by heat sensing device continuously.
Which Months: All Year Statistical Basis: None specified
State Only. Develop a corrective action plan for re-lighting the flare. Plan must be kept readily available for immediate implementation in the event the flare needs to be re-lit.

EQT 0218 UR-01 - Steam Gas Reformer Heater

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
Which Months: All Year Statistical Basis: None specified
Total suspended particulate <= 0.6 lb/MMBTU of heat input.
Which Months: All Year Statistical Basis: None specified

EQT 0219 WL-01 - Warehouse Drum Loading

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

EQT 0220 XK-01 - Loading/Unloading (Tank Trucks)

40 CFR 63 Subpart FFFF. Group 2 Transfer Rack. Transfer Rack loads greater than 171,700 gal/yr of organic liquids containing HAPs with a rack-weighted average partial pressure less than or equal to 1.5 psia, no controls required.
Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain applicable records in accordance with 40 CFR 63.2525.

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
Activity Number: PER20080007
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EQT 0238 XT-36 - IPHA Storage Tank

- 285 [40 CFR 63.123(a)]
286 [40 CFR 63.2470]
287 [LAC 33.III.5109.A]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Maximum true vapor pressure of total HAP is <1.0 psia.
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Tanks stores HAPs only as an impurity. No additional control determined as MACT.

EQT 0239 XT-37 - Oxazolidine Storage Tank

- 288 [40 CFR 63.123(a)]
289 [40 CFR 68.2470]

Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Maximum true vapor pressure of total HAP is <1.0 psia.

EQT 0248 F-42 - Hydrogen Knock-out Pot

- 290 [LAC 33.III.501.C.6]
291 [LAC 33.III.5109.A]

Hydrogen <= 32.29 tons/yr.
Which Months: All Year Statistical Basis: Annual maximum
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only, must meet ambient air standards; No MACT requirements apply

EQT 0276 DT-55 - Sulfuric Acid Tank

- 292 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only, must meet ambient air standards; No MACT requirements apply

EQT 0277 DE-26 - NPD Flare System

- 293 [40 CFR 63.11(b)(1)]
294 [40 CFR 63.11(b)(3)]
295 [40 CFR 63.11(b)(4)]
296 [40 CFR 63.11(b)(5)]
297 [40 CFR 63.11(b)(5)]

Monitor flares to assure that they are operated and maintained in conformance with their designs. Subpart A. [40 CFR 63.11(b)(1)]
Operate at all times when emissions may be vented to the flare. Subpart A. [40 CFR 63.11(b)(3)]
Design and operate for no visible emissions, as determined using Test Method 22 in Appendix A of 40 CFR 60, except for periods not to exceed a total of 5 minutes during any two consecutive hours. Subpart A. [40 CFR 63.11(b)(4)]
Presence of a flame monitored by flame monitor continuously. Use a thermocouple or any other equivalent device to detect the presence of a flame. Subpart A. [40 CFR 63.11(b)(5)]
Which Months: All Year Statistical Basis: None specified
Operate with a flame present at all times. Subpart A. [40 CFR 63.11(b)(5)]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
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EQT 0277 DE-26 - NPD Flare System

- Heat content >= 300 BTU/scf (11.2 MJ/scm). Determine the net heating value of the gas being combusted using the equation specified in 40 CFR 63.11(b)(6)(ii). Subpart A. [40 CFR 63.11(b)(6)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Exit Velocity < 60 ft/sec (18.3 m/sec), as determined using the method specified in 40 CFR 63.11(b)(7)(i). Subpart A. [40 CFR 63.11(b)(7)(i)]
- Which Months: All Year Statistical Basis: None specified
- Meet the requirements of 40 CFR 63.982(b) and the requirements referenced therein, except when complying with 40 CFR 63.2485. Subpart FFFF. [40 CFR 63.2450(e)]
- Organic HAP >= 95 % reduction by weight. Subpart FFFF. [40 CFR 63.2460(a)]
- Which Months: All Year Statistical Basis: None specified
- HAP >= 95 % reduction by weight, or TOC or organic HAP <= 20 ppmv and hydrogen halide and halogens <= 20 ppmv. Subpart FFFF. [40 CFR 63.2470(a)]
- Which Months: All Year Statistical Basis: None specified
- Ensure that periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in 40 CFR 63 Subpart FFFF Table 4, do not exceed 240 hours per year (hr/yr). Subpart FFFF. [40 CFR 63.2470(d)]
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in 40 CFR 63.2525(a) through (k), as applicable. Subpart FFFF.
- Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets.
- Which Months: All Year Statistical Basis: None specified
- Submit notification: Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC), as soon as possible after the start of burning of pressure valve releases for control over process upsets. Notify in accordance with LAC 33:1.3923. Notification is required only if the upset cannot be controlled in six hours.
- Hydrogen <= 2.22 tons/yr.
- Which Months: All Year Statistical Basis: Annual maximum

EQT 0279 CT-22 - Methanol Tank

- Group 2 Storage Tank. Tank volume is less than 10,000 gallons; no controls required.
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in 40 CFR 63.2525(a) through (k), as applicable. Subpart FFFF.
- Equip with a submerged fill pipe.
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable.
- Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only, must meet ambient air standards; No MACT requirements apply.

EQT 0283 DF-25 - Biocide Check Tank

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co
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EQT 0283 DF-25 - Biocide Check Tank

- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
- 315 [LAC 33:III.2103.A]
Equip with a submerged fill pipe.

EQT 0285 DF-28 - Biocide Check Tank

- Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart FFFF. [40 CFR 63.123(a)]
40 CFR 63 Subpart FFFF. Tank is a Group 2 storage tank based on capacity, therefore, no control required. Tank volume is less than 10,000 gallons.
- 318 [LAC 33:III.2103.A]
Equip with a submerged fill pipe.

FUG 0003 F-7 - Derivatives Fugitives - Formaldehyde

- Unsafe- and difficult-to-monitor equipment: Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Record the identity of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) and the planned schedule for monitoring this equipment. Also record the identity of equipment designated as difficult-to-monitor according to the provisions of 40 CFR 63.1022(c)(2), the planned schedule for monitoring this equipment, and an explanation why the equipment is unsafe or difficult-to-monitor. Keep this record at the plant and make available for review by an inspector. Subpart UU [40 CFR 63.1022(c)(3)]
- Unsafe-to-monitor equipment: Have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b) and the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (viii) for pumps, 40 CFR 63.1027(a) and (b) for connectors, and 40 CFR 63.1028(c) for agitators. Subpart UU [40 CFR 63.1022(c)(4)(i)]
- Difficult-to-monitor equipment: Have a written plan that requires monitoring of the equipment at least once per calendar year and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) for valves, and 40 CFR 63.1028(c) for agitators. Subpart UU [40 CFR 63.1022(c)(4)(ii)]
- Connectors (unsafe-to-repair): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Record the identity of connectors designated as unsafe-to-repair and an explanation of why the connectors are unsafe-to-repair. Subpart UU. [40 CFR 63.1022(d)(2)]
- Equipment in heavy liquid service: Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service; or, when requested by DEQ, demonstrate that the piece of equipment or process is in heavy liquid service. Subpart UU. [40 CFR 63.1022(f)]
- Identify equipment subject to 40 CFR 63 Subpart UU as specified in 40 CFR 63.1022(8) through (f), as applicable. Subpart UU.

SPECIFIC REQUIREMENTS

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UG 0003 F-7 - Derivatives Fugitives - Formaldehyde

Attach a weatherproof and readily visible identification to leaking equipment, when a leak is detected pursuant to the monitoring specified in 40

CFR 63.1023(e)(1)] Subpart UU. [40 CFR 63.1023(e)(1)]

Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of a leak. Record the information specified in 40 CFR 63.1024(f) when a leak is detected. Keep the records pursuant to the referencing subpart, except keep information for connectors complying with the 8 year monitoring period allowed under 40 CFR 63.1027(b)(3)(iii) for 5 years beyond the date of its last use. Subpart UU. [40 CFR 63.1023(e)(2)]

Repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as specified in 40 CFR 63.1024(a) and (e). Make a first attempt at repair no later than 5 calendar days after the leak is detected. Subpart UU. [40 CFR 63.1024(a)]

Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of delay of repair of a leak. Maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. Subpart UU. [40 CFR 63.1023(e)(2)]

Valves in gas/vapor service and light liquid service (the greater of 2 valves or 2% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Subpart UU. [40 CFR 63.1025(b)(3)(i)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service (less than the greater of 2 valves or 2% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks, except as specified in 40 CFR 63.1025(b)(3)(ii) through (b)(3)(v). If a reading of 500 ppm or greater is recorded, a leak is detected. Initiate repair provisions specified in 40 CFR 63.1025(d). Subpart UU. [40 CFR 63.1025(b)(3)(ii)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 semiannually to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(iii)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(iv)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service (less than 0.25% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(v)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep a record of the monitoring schedule for each process unit. Subpart UU. [40 CFR 63.1025(b)(3)(vi)]

Valves in gas/vapor service and light liquid service: Calculate the percent leaking values for each monitoring period for each process unit or valve subgroup using the equation in 40 CFR 63.1025(c)(1)(ii). Subpart UU. [40 CFR 63.1025(c)(1)(ii)]

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FUG 0003 F-7 - Derivatives Fugitives - Formaldehyde

- 336 [40 CFR 63.1025(d)(2)] Valves in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within three months after repair of a leak to determine whether the valve has resumed leaking. Subpart UU. [40 CFR 63.1025(d)(2)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2). Subpart UU. [40 CFR 63.1025(e)(1)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service and light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually to detect leaks. Monitor at least once per calendar year. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b). Subpart UU. [40 CFR 63.1025(e)(2)]
- Which Months: All Year Statistical Basis: None specified
- Valves in gas/vapor service and light liquid service (fewer than 250 valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the monthly monitoring specified in 40 CFR 63.1025(b)(3)i. Subpart UU. [40 CFR 63.1025(e)(3)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, follow the procedure specified in 40 CFR 63.1026(b)(4)(i) or (b)(4)(ii). Subpart UU. [40 CFR 63.1026(b)(4)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Subpart UU. [40 CFR 63.1026(b)(4)]
- Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a reading of 5,000 ppm (pumps handling polymerizing monomers), 2,000 ppm (pumps in food/medical service), or 1,000 ppm (all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1026(d). Initiate repairs for pumps with a 1,000 ppm leak definition only when an instrument reading of 2,000 ppm or greater is detected. Subpart UU. [40 CFR 63.1026(b)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service: Implement a quality improvement program that complies with 40 CFR 63.1035 if, when calculated on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart UU. [40 CFR 63.1026(c)(2)]
- Pumps in light liquid service: Determine percent leaking pumps using the equation specified in 40 CFR 63.1026(c)(4). Subpart UU. [40 CFR 63.1026(c)(4)]

SPECIFIC REQUIREMENTS

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FUG 0003 F-7 - Derivatives Fugitives - Formaldehyde

345 [40 CFR 63.1026(e)(1)(i)]

Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.

Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(i)]

346 [40 CFR 63.1026(e)(1)(ii)]

Pumps in light liquid service (dual mechanical seal system): Equipment/operational data recordkeeping by electronic or hard copy once initially installed, shutdown, or malfunction greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(ii)]

347 [40 CFR 63.1026(e)(1)(iii)]

Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times (except periods of startup, shutdown, or revision). Keep records at the plant of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Make records available for review by an inspector. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(iii)]

348 [40 CFR 63.1026(e)(1)(iv)]

Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(iv)]

349 [40 CFR 63.1026(e)(1)(v)]

Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, the barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(v)]

350 [40 CFR 63.1026(e)(1)(vi)]

Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal, follow the procedure specified in 40 CFR 63.1026(e)(1)(v)(A) or (e)(1)(v)(B) prior to the next required inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(vi)]

351 [40 CFR 63.1026(e)(1)(vii)]

Which Months: All Year Statistical Basis: None specified Pumps in light liquid service (dual mechanical seal system): Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(vii)]

352 [40 CFR 63.1026(e)(1)(viii)]

Pumps in light liquid service (dual mechanical seal system - sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(viii)]

353 [40 CFR 63.1026(e)(6)]

Which Months: All Year Statistical Basis: None specified Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 5,000 ppm (pumps handling polymerizing monomers), 2,000 ppm (pumps in food/medical service), or 1,000 ppm (all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements of 40 CFR 63.1026(b) and the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (vii). Subpart UU. [40 CFR 63.1026(e)(6)]

Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

FUG 0003 F-7 - Derivatives Fugitives - Formaldehyde

- 354 [40 CFR 63.1027(a)] Connectors in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor all connectors in each process unit initially for leaks by the later of either 12 months after the compliance date as specified in a referencing subpart or 12 months after initial startup. If an instrument reading of 500 ppm or greater is measured, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(a)]
- 355 [40 CFR 63.1027(b)(3)(i)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service (0.5% or greater leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor within 12 months after the initial monitoring specified in 40 CFR 63.1027(a). If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU.
- 356 [40 CFR 63.1027(b)(3)(i)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service (greater than or equal to 0.25% but less than 0.5% leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor within 4 years after the initial monitoring specified in 40 CFR 63.1027(a). If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(b)(3)(ii)]
- 357 [40 CFR 63.1027(b)(3)(iii)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service (less than 0.25% leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor connectors as specified in 40 CFR 63.1027(b)(3)(iii)(A) and either (b)(3)(iii)(B) or (b)(3)(iii)(C), as appropriate. If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(b)(3)(iii)]
- 358 [40 CFR 63.1027(b)(3)(iv)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 90 days after repair of a connector that is found to be leaking during the monitoring conducted pursuant to 40 CFR 63.1027(b)(3)(i) through (b)(3)(iii), to confirm that it is not leaking. Subpart UU. [40 CFR 63.1027(b)(3)(iv)]
- 359 [40 CFR 63.1027(b)(3)(v)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep a record of the start date and end date of each monitoring period under 40 CFR 63.1027 for each process unit. Subpart UU. [40 CFR 63.1027(b)(3)(v)]
- 360 [40 CFR 63.1027(c)] Connectors in gas/vapor service and light liquid service: Calculate percent leaking connectors using the equation in 40 CFR 63.1027(c). Subpart UU. [40 CFR 63.1027(c)]
- 361 [40 CFR 63.1027(e)(1)] Connectors in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1027(a) and (b). Subpart UU. [40 CFR 63.1027(e)(1)]
- Which Months: All Year Statistical Basis: None specified

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AI ID: 1556 - Angus Chemical Co

Activity Number: PER20080007

Permit Number: 2011-V5

Air - Title V Regular Permit Renewal

FUG 0003 F-7 - Derivatives Fugitives - Formaldehyde

- Connectors in gas/vapor service and light liquid service (inaccessible, ceramic, or ceramic-lined): Eliminate the visual, audible, olfactory, or other indications of a leak to the atmosphere as soon as practical, if connector is observed by visual, audible, olfactory, or other means to be leaking. Comply with this requirement in lieu of the monitoring requirements of 40 CFR 63.1027(a) and (b), and the recordkeeping and reporting requirements of 63.1038 and 63.1039. Subpart UU. [40 CFR 63.1027(e)(2)(ii)]
- Agitators in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as specified in 40 CFR 63.1021(b), 63.1036, 63.1037, or 63.1039. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1028(d). Subpart UU. [40 CFR 63.1028(c)(1)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service: Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Subpart UU. [40 CFR 63.1028(c)(3)]
- Agitators in gas/vapor service and light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal, follow the procedures specified in 40 CFR 63.1028(c)(3)(ii)(A) or (c)(3)(ii)(B) prior to the next required inspection. Subpart UU. [40 CFR 63.1028(c)(3)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times (except during periods of startup, shutdown, or malfunction) greater than the agitator stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(i)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in liquid service. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(ii)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(iii)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal, follow the procedures specified in 40 CFR 63.1028(e)(1)(iv)(A) or (e)(1)(iv)(B) prior to the next required inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(iv)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system - sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator seal is located within the boundary of an unmanned plant site. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(v)]
- Which Months: All Year Statistical Basis: None specified
- 362 [40 CFR 63.1027(e)(2)(ii)]
- 363 [40 CFR 63.1028(c)(1)]
- 364 [40 CFR 63.1028(c)(3)]
- 365 [40 CFR 63.1028(c)(3)]
- 366 [40 CFR 63.1028(e)(1)(i)]
- 367 [40 CFR 63.1028(e)(1)(ii)]
- 368 [40 CFR 63.1028(e)(1)(iii)]
- 369 [40 CFR 63.1028(e)(1)(iv)]
- 370 [40 CFR 63.1028(e)(1)(v)]

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AI ID: 1556 - Angus Chemical Co
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FUG 003 F-7 - Derivatives Fugitives - Formaldehyde

- 371 [40 CFR 63.1028(e)(1)(vi)(A)] Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both and applicable to the presence and frequency of drips. If indications of liquids dripping from the agitator seal exceed the criteria, or if, based on the criteria the sensor indicates a failure of the seal system, the barrier fluid system, or both, a leak is detected. If a leak is detected, repair pursuant to 40 CFR 63.1024, as applicable. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(e)(1)(vi)(A). Subpart UU. [40 CFR 63.1028(e)(1)(vi)(A)]
- 372 [40 CFR 63.1028(e)(1)(vi)(B)] Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(vi)(B)]
- 373 [40 CFR 63.1028(e)(4)] Agitators in gas/vapor service and light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement in lieu of the weekly visual inspection requirements of 40 CFR 63.1028(c)(3) and (e)(1)(iv) and the daily requirements of 40 CFR 63.1028(e)(1)(v). Subpart UU. [40 CFR 63.1028(e)(4)]
- Which Months: All Year Statistical Basis: None specified
- 374 [40 CFR 63.1028(e)(5)] Agitators in gas/vapor service and light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor at least once per calendar year. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(5)]
- Which Months: All Year Statistical Basis: None specified
- 375 [40 CFR 63.1028(e)(7)] Agitators in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(7)]
- Which Months: All Year Statistical Basis: None specified
- 376 [40 CFR 63.1029(b)] Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method, unless the potential leak is repaired as required in 40 CFR 63.1029(c). If an instrument reading of 10,000 ppm or greater (agitators), 5,000 ppm or greater (pumps handling polymerizing monomers), 2,000 ppm or greater (pumps in food and medical service, and all other pumps), or 500 ppm or greater (valves, connectors, instrumentation systems, and pressure relief devices) is measured, a leak is detected. If a leak is detected, repair pursuant to 40 CFR 63.1024, as applicable. Subpart UU. [40 CFR 63.1029(b)]
- Which Months: All Year Statistical Basis: None specified
- 377 [40 CFR 63.1030(b)] Pressure relief devices in gas/vapor service: Organic HAP < 500 ppm except during pressure releases as provided for in 40 CFR 63.1030(c), or as otherwise specified in 40 CFR 63.1036, 63.1037, or 63.1030(d) or (e). Subpart UU. [40 CFR 63.1030(b)]
- Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

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FUG 0003 F-7 - Derivatives Fugitives - Formaldehyde

Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.1024(d). Subpart UU. [40 CFR 63.1030(c)(1)]

Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after a pressure release to confirm the condition indicated by an instrument reading of less than 500 ppm above background. Subpart UU. [40 CFR 63.1030(c)(2)]

Which Months: All Year Statistical Basis: None specified

Pressure relief devices in gas/vapor service: Monitoring data recordkeeping by electronic or hard copy within 5 days (calendar) after a pressure release. Record the dates and results of the monitoring required by 40 CFR 63.1030(c)(2) following a pressure release including the background level measured and the maximum instrument reading measured during the monitoring. Subpart UU. [40 CFR 63.1030(c)(3)]

Pressure relief devices in gas/vapor service (rupture disk): Install a replacement rupture disk upstream of the pressure relief device as soon as practical after each pressure release but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.1024(d).

Comply with this requirement in lieu of the requirements in 40 CFR 63.1030(b) and (c). Subpart UU. [40 CFR 63.1030(e)]

Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 63.1031(e) and (f). Subpart UU. [40 CFR 63.1031(b)]

Compressors (seal system): Operate with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times, (except during periods of startup, shutdown, or malfunction); or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 63.1021(h); or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart UU. [40 CFR 63.1031(b)]

Compressors: Equip each barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart UU. [40 CFR 63.1031(c)]

Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart UU. [40 CFR 63.1031(c)]

Compressors (sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an alarm unless the compressor is located within the boundary of an unmanned plant site. Subpart UU. [40 CFR 63.1031(c)]

Which Months: All Year Statistical Basis: None specified

Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024, as applicable. Subpart UU. [40 CFR 63.1031(d)(1)]

Compressors: Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Subpart UU. [40 CFR 63.1031(d)(2)]

Compressors (routed to a process or fuel gas system or equipped with a closed-vent system): Equip with a system to capture and transport leakage from the compressor drive shaft seal to a process or a fuel gas system or to a closed-vent system that captures and transports leakage from the compressor to a control device meeting the requirements of either 40 CFR 63.1034 or 63.1021(b). Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(e)]

FUG 0003 F-7 - Derivatives Fugitives - Acetone

378 [40 CFR 63.1030(c)(1)]

379 [40 CFR 63.1030(c)(2)]

380 [40 CFR 63.1030(c)(3)]

381 [40 CFR 63.1030(e)]

382 [40 CFR 63.1031(b)]

383 [40 CFR 63.1031(b)]

384 [40 CFR 63.1031(c)]

385 [40 CFR 63.1031(c)]

386 [40 CFR 63.1031(c)]

387 [40 CFR 63.1031(d)(1)]

388 [40 CFR 63.1031(d)(2)]

389 [40 CFR 63.1031(e)]

SPECIFIC REQUIREMENTS

AI ID: 1556 - Angus Chemical Co

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FUG_0003 F-7 - Derivatives Fugitives - Formaldehyde

Compressors (operating with instrument reading of less than 500 ppm above background): Organic HAP < 500 ppm above background at all times, as demonstrated initially upon designation, annually, and at other times requested by DEQ. Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(f)(1)].

Which Months: All Year Statistical Basis: None specified

Compressors (operating with instrument reading of less than 500 ppm above background): Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of a compliance test. Record the dates and results of each compliance test including the background level measured and the maximum instrument reading measured during each compliance test. Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(f)(2)]

Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.1021(b).

63.1036, 63.1037, or 63.1032(d). Operate the system as specified in 40 CFR 63.1032(c)(1) through (c)(5). Subpart UU.

Open ended valves or lines: Equip with a cap, blind flange, plug, or second valve, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 63.1033(c) and (d). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart UU. [40 CFR 63.1033(b)]

Submit Initial Compliance Status Report: Due according to the procedures in the referencing subpart. Include the information listed in 40 CFR 63.1039(a)(1) through (a)(3), as applicable. Subpart UU. [40 CFR 63.1039(a)]

Submit Periodic Reports: Due according to the procedures in the referencing subpart. Include the information listed in 40 CFR 63.1039(b) through (b)(8), as applicable. Subpart UU. [40 CFR 63.1039(b)]

Comply with the requirements in 40 CFR 63 Subpart UU and the requirements referenced therein. Subpart FFFF. [40 CFR 63.2480(a)]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.2525(a) through (K), as applicable. Subpart FFFF.

Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.

State Only - The number of each type of component required to be monitored for each monitoring period under applicable leak detection and repair programs shall be reported to the LDEQ by inclusion with each periodic monitoring report. Fugitive emission piping components may be added to or removed from the permitted units, without triggering the need to apply for a permit modification provided:

- a. Changes in components involve routine maintenance or are undertaken to address safety concerns, or involve small piping revisions with no associated emissions increase except from the fugitive emissions components themselves;
- b. The changes do not involve any associated increases in production rate or capacity, or tie in of new or modified process equipment other than the piping components;
- c. Actual emissions following the changes will not exceed the emission limits contained in this permit; and

- d. The components are promptly incorporated into any applicable LDAR program.

SPECIFIC REQUIREMENTS

AI ID: 1558 - Angus Chemical Co
Activity Number: PER20080007
Permit Number: 2011-V5
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FUG_0003 F-7 - Derivatives Fugitives - Formaldehyde

Comply with Louisiana MACT Determination for Non-HON Sources by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with 40 CFR 63 Subpart UU. See specific condition in Appendix A.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Compliance with 40 CFR 63 Subpart UU by 40 CFR 63 Subpart FFFF is determined as MACT. Comply with 40 CFR 63 Subpart UU in accordance with streamlined fugitives monitoring program defined in the Part 70 Specific Condition in Appendix A.

FUG_0004 F-7C - Crystals Fugitives

- 400 [LAC 33:III.501] Unsafe- and difficult-to-monitor equipment: Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Record the identity of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) and the planned schedule for monitoring this equipment. Also record the identity of equipment designated as difficult-to-monitor according to the provisions of 40 CFR 63.1022(c)(2), the planned schedule for monitoring this equipment, and an explanation why the equipment is unsafe or difficult-to-monitor. Keep this record at the plant and make available for review by an inspector. Subpart UU. [40 CFR 63.1022(c)(3)]
- 401 [LAC 33:III.5109.A] Unsafe-to-monitor equipment: Have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2) for valves, 40 CFR 63.1026(b) and the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (viii) for pumps, 40 CFR 63.1027(a) and (b) for connectors, and 40 CFR 63.1028(c) for agitators. Subpart UU. [40 CFR 63.1022(c)(4)(i)]
- 402 [40 CFR 63.1022(c)(3)] Difficult-to-monitor equipment: Have a written plan that requires monitoring of the equipment at least once per calendar year and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) for valves, and 40 CFR 63.1028(c) for agitators. Subpart UU. [40 CFR 63.1022(c)(4)(ii)]
- 403 [40 CFR 63.1022(c)(4)(i)] Connectors (unsafe-to-repair): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Record the identity of connectors designated as unsafe-to-repair and an explanation of why the connectors are unsafe-to-repair. Subpart UU. [40 CFR 63.1022(c)(4)(ii)]
- 404 [40 CFR 63.1022(c)(4)(ii)] Equipment in heavy liquid service: Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service; or, when requested by DEQ, demonstrate that the piece of equipment or process is in heavy liquid service. Subpart UU. [40 CFR 63.1022(f)]
- 405 [40 CFR 63.1022(d)(2)] Identify equipment subject to 40 CFR 63 Subpart UU as specified in 40 CFR 63.1022(a) through (f), as applicable. Subpart UU.
- 406 [40 CFR 63.1022(f)] Attach a weatherproof and readily visible identification to leaking equipment, when a leak is detected pursuant to the monitoring specified in 40 CFR 63.1023(a). Subpart UU. [40 CFR 63.1023(e)(1)]
- 407 [40 CFR 63.1022] Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of a leak. Record the information specified in 40 CFR 63.1024(f) when a leak is detected. Keep the records pursuant to the referencing subpart, except keep information for connectors complying with the 8 year monitoring period allowed under 40 CFR 63.1027(b)(3)(iii) for 5 years beyond the date of its last use. Subpart UU. [40 CFR 63.1023(e)(2)]
- 408 [40 CFR 63.1023(e)(1)] Repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as specified in 40 CFR 63.1024(d) and (e). Make a first attempt at repair no later than 5 calendar days after the leak is detected. Subpart UU. [40 CFR 63.1024(a)]
- 409 [40 CFR 63.1023(e)(2)]
- 410 [40 CFR 63.1024(a)]

SPECIFIC REQUIREMENTS

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FUG 0004 F-7C - Crystals Fugitives

- 411 [40 CFR 63.1024(d)] Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of delay of repair of a leak. Maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. Subpart UU [40 CFR 63.1024(d)]
- 412 [40 CFR 63.1025(b)(3)(i)] Valves in gas/vapor service and light liquid service (the greater of 2 valves or 2% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Subpart UU. [40 CFR 63.1025(b)(3)(i)]
- 413 [40 CFR 63.1025(b)(3)(ii)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (less than the greater of 2 valves or 2% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks, except as specified in 40 CFR 63.1025(b)(3)(iii) through (b)(3)(v). If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Subpart UU. [40 CFR 63.1025(b)(3)(ii)]
- 414 [40 CFR 63.1025(b)(3)(iii)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (less than 1% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 semiannually to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(iii)]
- 415 [40 CFR 63.1025(b)(3)(iv)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(iv)]
- 416 [40 CFR 63.1025(b)(3)(v)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (less than 0.25% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(v)]
- 417 [40 CFR 63.1025(b)(3)(vi)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep a record of the monitoring schedule for each process unit. Subpart UU. [40 CFR 63.1025(b)(3)(vi)]
- 418 [40 CFR 63.1025(c)(1)(ii)] Valves in gas/vapor service and light liquid service: Calculate the percent leaking valves for each monitoring period for each process unit or valve subgroup using the equation in 40 CFR 63.1025(c)(1)(ii). Subpart UU. [40 CFR 63.1025(c)(1)(ii)]
- 419 [40 CFR 63.1025(d)(2)] Valves in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within three months after repair of a leak to determine whether the valve has resumed leaking. Subpart UU. [40 CFR 63.1025(d)(2)]
- Which Months: All Year Statistical Basis: None specified

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- 420 [40 CFR 63.1025(e)(1)] Valves in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulations specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2). Subpart UU. [40 CFR 63.1025(e)(1)]
- Which Months: All Year Statistical Basis: None specified
Valves in gas/vapor service and light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually to detect leaks. Monitor at least once per calendar year. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b). Subpart UU. [40 CFR 63.1025(e)(2)]
- 421 [40 CFR 63.1025(e)(2)]
Which Months: All Year Statistical Basis: None specified
Valves in gas/vapor service and light liquid service (fewer than 250 valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the monthly monitoring specified in 40 CFR 63.1025(b). Subpart UU. [40 CFR 63.1025(e)(2)]
- 422 [40 CFR 63.1025(e)(3)]
Which Months: All Year Statistical Basis: None specified
Valves in gas/vapor service and light liquid service (fewer than 250 valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the monthly monitoring specified in 40 CFR 63.1025(b). Subpart UU. [40 CFR 63.1025(e)(3)]
- 423 [40 CFR 63.1026(b)(4)]
Which Months: All Year Statistical Basis: None specified
Pumps in light liquid service: Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Subpart UU. [40 CFR 63.1026(b)(4)]
- 424 [40 CFR 63.1026(b)(4)]
Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, follow the procedure specified in 40 CFR 63.1026(b)(4)(i) or (b)(4)(ii). Subpart UU. [40 CFR 63.1026(b)(4)]
- 425 [40 CFR 63.1026(b)]
Which Months: All Year Statistical Basis: None specified
Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a reading of 5,000 ppm (pumps handling polymerizing monomers), 2,000 ppm (pumps in food/medical service), or 1,000 ppm (all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1026(d). Initiate repairs for pumps with a 1,000 ppm leak definition only when an instrument reading of 2,000 ppm or greater is detected. Subpart UU. [40 CFR 63.1026(b)]
- 426 [40 CFR 63.1026(c)(2)]
Which Months: All Year Statistical Basis: None specified
Pumps in light liquid service: Implement a quality improvement program that complies with 40 CFR 63.1035 if, when calculated on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart UU. [40 CFR 63.1026(c)(2)]
- 427 [40 CFR 63.1026(c)(4)]
Pumps in light liquid service: Determine percent leaking pumps using the equation specified in 40 CFR 63.1026(c)(4). Subpart UU. [40 CFR 63.1026(c)(4)]
- 428 [40 CFR 63.1026(e)(1)(i)]
Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(i)]

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429 [40 CFR 63.1026(e)(1)(i)]

Pumps in light liquid service (dual mechanical seal system): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records at the plant of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Make records available for review by an inspector. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(i)]

430 [40 CFR 63.1026(e)(1)(ii)]

Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times (except periods of startup, shutdown, or malfunction) greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(ii)]

431 [40 CFR 63.1026(e)(1)(iii)]

Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(iii)]

Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, the barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(iv)]

433 [40 CFR 63.1026(e)(1)(v)]

Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar procedure specified in 40 CFR 63.1026(e)(1)(v)(A) or (e)(1)(v)(B) prior to the next required inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(v)]

434 [40 CFR 63.1026(e)(1)(vi)]

Which Months: All Year Statistical Basis: None specified
Pumps in light liquid service (dual mechanical seal system - sensor): Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(vi)]

435 [40 CFR 63.1026(e)(1)(vii)]

Pumps in light liquid service (dual mechanical seal system - sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(vii)]

Which Months: All Year Statistical Basis: None specified
Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 5,000 ppm (pumps handling polymerizing monomers), 2,000 ppm (pumps in food/medical service), or 1,000 ppm (all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements of 40 CFR 63.1026(b) and the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (viii). Subpart UU. [40 CFR 63.1026(e)(6)]

Which Months: All Year Statistical Basis: None specified

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437 [40 CFR 63.1027(b)]

Connectors in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor all connectors in each process unit initially for leaks by the later of either 12 months after the compliance date as specified in a referencing subpart or 12 months after initial startup. If an instrument reading of 500 ppm or greater is measured, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(a)]

438 [40 CFR 63.1027(b)(3)(i)]

Which Months: All Year Statistical Basis: None specified
Connectors in gas/vapor service and light liquid service (0.5% or greater leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor within 12 months after the initial monitoring specified in 40 CFR 63.1027(d). Subpart UU. If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(b)(3)(i)]

439 [40 CFR 63.1027(b)(3)(ii)]

Which Months: All Year Statistical Basis: None specified
Connectors in gas/vapor service and light liquid service (less than 0.25% leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor within 4 years after the initial monitoring specified in 40 CFR 63.1027(a). If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(b)(3)(ii)]

440 [40 CFR 63.1027(b)(3)(iii)]

Which Months: All Year Statistical Basis: None specified
Connectors in gas/vapor service and light liquid service (less than 0.25% leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor connectors as specified in 40 CFR 63.1027(b)(3)(A) and either (b)(3)(iii)(B) or (b)(3)(iii)(C), as appropriate. If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(b)(3)(iii)]

441 [40 CFR 63.1027(b)(3)(iv)]

Which Months: All Year Statistical Basis: None specified
Connectors in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 90 days after repair of a connector that is found to be leaking during the monitoring conducted pursuant to 40 CFR 63.1027(b)(3)(i) through (b)(3)(iii), to confirm that it is not leaking. Subpart UU. [40 CFR 63.1027(b)(3)(iv)]

442 [40 CFR 63.1027(b)(3)(v)]

Which Months: All Year Statistical Basis: None specified
Connectors in gas/vapor service and light liquid service: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep a record of the start date and end date of each monitoring period under 40 CFR 63.1027 for each process unit. Subpart UU. [40 CFR 63.1027(b)(3)(v)]

443 [40 CFR 63.1027(c)]

Connectors in gas/vapor service and light liquid service: Calculate percent leaking connectors using the equation in 40 CFR 63.1027(c). Subpart UU. [40 CFR 63.1027(c)]
Connectors in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1027(a) and (b). Subpart UU. [40 CFR 63.1027(e)(1)]

444 [40 CFR 63.1027(e)(1)]
Which Months: All Year Statistical Basis: None specified

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445 [40 CFR 63.1027(e)(2)(ii)]

Connectors in gas/vapor service and light liquid service (inaccessible, ceramic, or ceramic-lined): Eliminate the visual, audible, olfactory, or other indications of a leak to the atmosphere as soon as practical, if connector is observed by visual, audible, olfactory, or other means to be leaking. Comply with this requirement in lieu of the monitoring requirements of 40 CFR 63.1027(a) and (b), and the recordkeeping and reporting requirements of 63.1038 and 63.1039. Subpart UU. [40 CFR 63.1027(e)(2)(ii)]

446 [40 CFR 63.1028(c)(1)]

Agitators in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as specified in 40 CFR 63.1021(b), 63.1036, 63.1037, or 63.1028(e). If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1028(d). Subpart UU. [40 CFR 63.1028(c)(1)]

447 [40 CFR 63.1028(c)(3)]

Which Months: All Year Statistical Basis: None specified
Agitators in gas/vapor service and light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal, follow the procedures specified in 40 CFR 63.1028(c)(3)(ii)(A) or (c)(3)(ii)(B) prior to the next required inspection. Subpart UU. [40 CFR 63.1028(c)(3)]

448 [40 CFR 63.1028(c)(3)]

Which Months: All Year Statistical Basis: None specified
Agitators in gas/vapor service and light liquid service: Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Subpart UU. [40 CFR 63.1028(c)(3)]

449 [40 CFR 63.1028(e)(1)(i)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times (except during periods of startup, shutdown, or malfunction) greater than the agitator stuffing box pressure, or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(i)]

450 [40 CFR 63.1028(e)(1)(ii)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(ii)]

451 [40 CFR 63.1028(e)(1)(iii)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(iii)]

452 [40 CFR 63.1028(e)(1)(iv)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal, follow the procedures specified in 40 CFR 63.1028(e)(1)(iv)(A) or (e)(1)(iv)(B) prior to the next required inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(iv)]

453 [40 CFR 63.1028(e)(1)(v)]

Which Months: All Year Statistical Basis: None specified
Agitators in gas/vapor service and light liquid service (dual mechanical seal system - sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator seal is located within the boundary of an unmanned plant site. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(v)]

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454 [40 CFR 63.1028(e)(1)(vi)(A)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both and applicable to the presence and frequency of drips. If indications of liquids dripping from the agitator seal exceed the criteria, or if, based on the criteria the sensor indicates a failure of the seal system, the barrier fluid system, or both, a leak is detected. If a leak is detected, repair pursuant to 40 CFR 63.1024, as applicable. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(vi)(A)]

455 [40 CFR 63.1028(e)(1)(vi)(B)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c).

Subpart UU. [40 CFR 63.1028(e)(1)(vi)(B)]

Agitators in gas/vapor service and light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement in lieu of the weekly visual inspection requirements of 40 CFR 63.1028(c)(3) and (e)(1)(iv) and the daily requirements of 40 CFR 63.1028(e)(1)(v).

Subpart UU. [40 CFR 63.1028(e)(4)]

Which Months: All Year Statistical Basis: None specified

Agitators in gas/vapor service and light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor at least once per calendar year. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(5)]

Which Months: All Year Statistical Basis: None specified

Agitators in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(7)]

Which Months: All Year Statistical Basis: None specified

Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method, unless the potential leak is repaired as required in 40 CFR 63.1029(c). If an instrument reading of 10,000 ppm or greater (agitators), 5,000 ppm or greater (pumps handling polymerizing monomers), 2,000 ppm or greater (pumps in food and medical service, and all other pumps), or 500 ppm or greater (valves, connectors, instrumentation systems, and pressure relief devices) is measured, a leak is detected. If a leak is detected, repair pursuant to 40 CFR 63.1024, as applicable. Subpart UU. [40 CFR 63.1029(b)]

Which Months: All Year Statistical Basis: None specified

Pressure relief devices in gas/vapor service: Organic HAP < 500 ppm except during pressure releases as provided for in 40 CFR 63.1030(c), or as otherwise specified in 40 CFR 63.1036, 63.1037, or 63.1030(d) or (e). Subpart UU. [40 CFR 63.1030(b)]

Which Months: All Year Statistical Basis: None specified

456 [40 CFR 63.1028(e)(4)]

Agitators in gas/vapor service and light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at

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461	[40 CFR 63.1030(c)(1)]	Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.1024(d). Subpart UU. [40 CFR 63.1030(c)(1)]
462	[40 CFR 63.1030(c)(2)]	Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after a pressure release to confirm the condition indicated by an instrument reading of less than 500 ppm above background. Subpart UU. [40 CFR 63.1030(c)(2)]
463	[40 CFR 63.1030(c)(3)]	Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service: Monitoring data recordkeeping by electronic or hard copy within 5 days (calendar) after a pressure release. Record the dates and results of the monitoring required by 40 CFR 63.1030(c)(2) following a pressure release including the background level measured and the maximum instrument reading measured during the monitoring. Subpart UU. [40 CFR 63.1030(c)(3)]
464	[40 CFR 63.1030(e)]	Pressure relief devices in gas/vapor service (rupture disk): Install a replacement rupture disk upstream of the pressure relief device as soon as practical after each pressure release but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.1024(d).
465	[40 CFR 63.1031(b)]	Comply with this requirement in lieu of the requirements in 40 CFR 63.1030(b) and (c). Subpart UU. [40 CFR 63.1030(e)]
466	[40 CFR 63.1031(b)]	Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 63.1037, and 63.1031(e) and (f). Subpart UU. [40 CFR 63.1031(b)]
467	[40 CFR 63.1031(c)]	Compressors (seal system): Operate with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times (except during periods of startup, shutdown, or malfunction); or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart UU. [40 CFR 63.1031(b)]
468	[40 CFR 63.1031(c)]	Compressors: Equip each barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart UU. [40 CFR 63.1031(c)]
469	[40 CFR 63.1031(c)]	Compressors (sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an alarm unless the compressor is located within the boundary of an unmanned plant site. Subpart UU. [40 CFR 63.1031(c)]
470	[40 CFR 63.1031(d)(1)]	Which Months: All Year Statistical Basis: None specified Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart UU. [40 CFR 63.1031(c)]
471	[40 CFR 63.1031(d)(2)]	Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024, as applicable. Subpart UU. [40 CFR 63.1031(d)(1)]
472	[40 CFR 63.1031(e)]	Compressors: Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Subpart UU. [40 CFR 63.1031(d)(2)]

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FUG 0004 F-7C - Crystals Fugitives

473 [40 CFR 63.1031(f)(1)]

Compressors (operating with instrument reading of less than 500 ppm above background): Organic HAP < 500 ppm above background at all times, as demonstrated initially upon designation, annually, and at other times requested by DEQ. Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(f)(1)]

Which Months: All Year Statistical Basis: None specified
Compressors (operating with instrument reading of less than 500 ppm above background): Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of a compliance test. Record the dates and results of each compliance test including the background level measured and the maximum instrument reading measured during each compliance test. Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(f)(2)]

Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.1021(b).
63.1036, 63.1037, or 63.1032(d). Operate the system as specified in 40 CFR 63.1032(c)(1) through (c)(5). Subpart UU.
Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 63.1033(c) and (d). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart UU. [40 CFR 63.1033(b)]

Submit Initial Compliance Status Report: Due according to the procedures in the referencing subpart. Include the information listed in 40 CFR 63.1039(a)(1) through (a)(3), as applicable. Subpart UU. [40 CFR 63.1039(a)]

Submit Periodic Reports: Due according to the procedures in the referencing subpart. Include the information listed in 40 CFR 63.1039(b)(1) through (b)(8), as applicable. Subpart UU. [40 CFR 63.1039(b)]

Comply with the requirements in 40 CFR 63 Subpart UU and the requirements referenced therein. Subpart FFFF. [40 CFR 63.2480(a)]
Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.2525(a) through (k), as applicable. Subpart FFFF.

Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.
State Only - The number of each type of component required to be monitored for each monitoring period under applicable leak detection and repair programs shall be reported to the LDEQ by inclusion with each periodic monitoring report. Fugitive emission piping components may be added to or removed from the permitted units, without triggering the need to apply for a permit modification provided:

- a. Changes in components involve routine maintenance or are undertaken to address safety concerns, or involve small piping revisions with no associated emissions increase except from the fugitive emissions components themselves;
- b. The changes do not involve any associated increases in production rate or capacity, or tie in of new or modified process equipment other than the piping components;
- c. Actual emissions following the changes will not exceed the emission limits contained in this permit; and

- d. The components are promptly incorporated into any applicable LDAR program.

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FUG 0004 F-7C - Crystals Fugitives

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

FUG 0005 F-7D - Derivatives Fugitives

- Unsafe- and difficult-to-monitor equipment: Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Record the identity of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) and the planned schedule for monitoring this equipment. Also record the identity of equipment designated as difficult-to-monitor according to the provisions of 40 CFR 63.1022(c)(2), the planned schedule for monitoring this equipment, and an explanation why the equipment is unsafe or difficult-to-monitor. Keep this record at the plant and make available for review by an inspector. Subpart UU. [40 CFR 63.1022(c)(3)]
- Unsafe-to-monitor equipment: Have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2) for valves, 40 CFR 63.1026(b) and the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (viii) for pumps, 40 CFR 63.1027(a) and (b) for connectors, and 40 CFR 63.1028(c) for agitators. Subpart UU. [40 CFR 63.1022(c)(4)(i)]
- Difficult-to-monitor equipment: Have a written plan that requires monitoring of the equipment at least once per calendar year and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) for valves, and 40 CFR 63.1028(c) for agitators. Subpart UU. [40 CFR 63.1022(c)(4)(ii)]
- Connectors (unsafe-to-repair): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Record the identity of connectors designated as unsafe-to-repair and an explanation of why the connectors are unsafe-to-repair. Subpart UU. [40 CFR 63.1022(d)(2)]
- Equipment in heavy liquid service: Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service; or, when requested by DEQ, demonstrate that the piece of equipment or process is in heavy liquid service. Subpart UU. [40 CFR 63.1022(f)]
- Identify equipment subject to 40 CFR 63.1022(a) through (f), as applicable. Subpart UU.
- Attach a weatherproof and readily visible identification to leaking equipment, when a leak is detected pursuant to the monitoring specified in 40 CFR 63.1023(a). Subpart UU. [40 CFR 63.1023(e)(1)]
- Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of a leak. Record the information specified in 40 CFR 63.1024(f) when a leak is detected. Keep the records pursuant to the referencing subpart, except keep information for connectors complying with the 8 year monitoring period allowed under 40 CFR 63.1027(b)(3)(iii) for 5 years beyond the date of its last use. Subpart UU. [40 CFR 63.1023(e)(2)]
- Repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as specified in 40 CFR 63.1024(d) and (e). Make a first attempt at repair no later than 5 calendar days after the leak is detected. Subpart UU. [40 CFR 63.1024(a)]
- Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of delay of repair of a leak. Maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. Subpart UU. [40 CFR 63.1024(d)]

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FUG 0005 F-7D - Derivatives Fugitives

494 [40 CFR 63.1025(b)(3)(ii)]

Valves in gas/vapor service and light liquid service (the greater of 2 valves or 2% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Subpart UU. [40 CFR 63.1025(b)(3)(i)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service (less than the greater of 2 valves or 2% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks, except as specified in 40 CFR 63.1025(b)(3)(iii) through (b)(3)(v). If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Subpart UU. [40 CFR 63.1025(b)(3)(ii)]

495 [40 CFR 63.1025(b)(3)(ii)]

Valves in gas/vapor service and light liquid service (less than 1% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a leak is detected, a leak is recorded. If a leak is detected, initiate repair provisions semiannually to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(iii)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(iv)]

496 [40 CFR 63.1025(b)(3)(ii)]

Valves in gas/vapor service and light liquid service (less than 0.25% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(v)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service (less than 0.25% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the specified frequency. Keep a record of the monitoring schedule for each process unit. Subpart UU. [40 CFR 63.1025(b)(3)(vi)]

497 [40 CFR 63.1025(b)(3)(ii)]

Valves in gas/vapor service and light liquid service: Calculate the percent leaking valves for each monitoring period for each process unit or valve subgroup using the equation in 40 CFR 63.1025(c)(1)(ii). Subpart UU. [40 CFR 63.1025(c)(1)(ii)]

Valves in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within three months after repair of a leak to determine whether the valve has resumed leaking. Subpart UU. [40 CFR 63.1025(d)(2)]

Which Months: All Year Statistical Basis: None specified

Valves in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2). Subpart UU. [40 CFR 63.1025(e)(1)]

498 [40 CFR 63.1025(b)(3)(v)]

Valves in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2). Subpart UU. [40 CFR 63.1025(e)(1)]

Which Months: All Year Statistical Basis: None specified

499 [40 CFR 63.1025(b)(3)(vi)]

Valves in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2). Subpart UU. [40 CFR 63.1025(e)(1)]

500 [40 CFR 63.1025(c)(1)(ii)]

Valves in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within three months after repair of a leak to determine whether the valve has resumed leaking. Subpart UU. [40 CFR 63.1025(d)(2)]

501 [40 CFR 63.1025(d)(2)]

Valves in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2). Subpart UU. [40 CFR 63.1025(e)(1)]

Which Months: All Year Statistical Basis: None specified

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FUG 0005 F-7D - Derivatives Fugitives

- 503 [40 CFR 63.1026(e)(2)] Valves in gas/vapor service and light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually to detect leaks. Monitor at least once per calendar year. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b). Subpart UU. [40 CFR 63.1025(e)(2)]
- 504 [40 CFR 63.1025(e)(3)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (fewer than 250 valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the monthly monitoring specified in 40 CFR 63.1025(b)(3)(i). Subpart UU. [40 CFR 63.1025(e)(3)]
- 505 [40 CFR 63.1026(b)(4)] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, follow the procedure specified in 40 CFR 63.1026(b)(4)(i) or (b)(4)(ii). Subpart UU. [40 CFR 63.1026(b)(4)]
- 506 [40 CFR 63.1026(b)(4)] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service: Inspection recordskeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Subpart UU. [40 CFR 63.1026(b)(4)]
- 507 [40 CFR 63.1026(b)] Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a reading of 5,000 ppm (pumps handling polymerizing monomers), 2,000 ppm (pumps in food/medical service), or 1,000 ppm (all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1026(d). Initiate repairs for pumps with a 1,000 ppm leak definition only when an instrument reading of 2,000 ppm or greater is detected. Subpart UU. [40 CFR 63.1026(b)]
- 508 [40 CFR 63.1026(c)(2)] Pumps in light liquid service: Implement a quality improvement program that complies with 40 CFR 63.1035 if, when calculated on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart UU. [40 CFR 63.1026(c)(2)]
- 509 [40 CFR 63.1026(c)(4)] Pumps in light liquid service: Determine percent leaking pumps using the equation specified in 40 CFR 63.1026(c)(4). Subpart UU. [40 CFR 63.1026(c)(4)]
- 510 [40 CFR 63.1026(e)(1)(i)] Pumps in light liquid service (dual mechanical seal system): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records at the plant of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Make records available for review by an inspector. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(i)]
- 511 [40 CFR 63.1026(e)(1)(i)] Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(i)]

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- 512 [40 CFR 63.1026(e)(1)(ii)] Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times (except periods of startup, shutdown, or malfunction) greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(ii)]
- 513 [40 CFR 63.1026(e)(1)(iii)] Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(iii)]
- 514 [40 CFR 63.1026(e)(1)(iv)] Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, the barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(iv)]
- 515 [40 CFR 63.1026(e)(1)(v)] Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal, follow the procedure specified in 40 CFR 63.1026(e)(1)(v)(A) or (e)(1)(v)(B) prior to the next required inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(v)]
- 516 [40 CFR 63.1026(e)(1)(vi)] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service (dual mechanical seal system): Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(vi)]
- 517 [40 CFR 63.1026(e)(1)(vii)] Pumps in light liquid service (dual mechanical seal system - sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(vii)]
- 518 [40 CFR 63.1026(e)(6)] Which Months: All Year Statistical Basis: None specified Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 5,000 ppm (pumps handling polymerizing monomers), 2,000 ppm (pumps in food/medical service), or 1,000 ppm (all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements of 40 CFR 63.1026(b) and the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (vii). Subpart UU. [40 CFR 63.1026(e)(6)]
- 519 [40 CFR 63.1027(a)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor all connectors in each process unit initially for leaks by the later of either 12 months after the compliance date as specified in a referencing subpart or 12 months after initial startup. If an instrument reading of 500 ppm or greater is measured, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(a)]

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- 520 [40 CFR 63.1027(b)(3)(ii)] Connectors in gas/vapor service and light liquid service (0.5% or greater leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor within 12 months after the initial monitoring specified in 40 CFR 63.1027(a). If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU [40 CFR 63.1027(b)(3)(i)]
- 521 [40 CFR 63.1027(b)(3)(iii)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service (greater than or equal to 0.25% but less than 0.5% leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor within 4 years after the initial monitoring specified in 40 CFR 63.1027(a). If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU [40 CFR 63.1027(b)(3)(ii)]
- 522 [40 CFR 63.1027(b)(3)(iv)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service (less than 0.25% leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor connectors as specified in 40 CFR 63.1027(b)(3)(iii)(A) and either (b)(3)(ii)(B) or (b)(3)(ii)(C), as appropriate. If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU [40 CFR 63.1027(b)(3)(iii)]
- 523 [40 CFR 63.1027(b)(3)(v)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 90 days after repair of a connector that is found to be leaking during the monitoring conducted pursuant to 40 CFR 63.1027(b)(3)(i) through (b)(3)(iii), to confirm that it is not leaking. Subpart UU [40 CFR 63.1027(b)(3)(iv)]
- 524 [40 CFR 63.1027(b)(3)(vi)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep a record of the start date and end date of each monitoring period under 40 CFR 63.1027 for each process unit. Subpart UU [40 CFR 63.1027(b)(3)(v)]
- 525 [40 CFR 63.1027(c)] Connectors in gas/vapor service and light liquid service: Calculate percent leaking connectors using the equation in 40 CFR 63.1027(c). Subpart UU [40 CFR 63.1027(c)]
- 526 [40 CFR 63.1027(e)(1)] Connectors in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1027(a) and (b). Subpart UU [40 CFR 63.1027(e)(1)]
- 527 [40 CFR 63.1027(e)(2)(ii)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service (inaccessible, ceramic, or ceramic-lined): Eliminate the visual, audible, olfactory, or other indications of a leak to the atmosphere as soon as practical, if connector is observed by visual, audible, olfactory, or other means to be leaking. Comply with this requirement in lieu of the monitoring requirements of 40 CFR 63.1027(e)(2)(ii). Subpart UU [40 CFR 63.1038 and 63.1039. Subpart UU: (40 CFR 63.1027(e)(2)(ii)]

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AI ID: 1556 - Angus Chemical Co

Activity Number: PER20008007

Permit Number: 2011-V5

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FUG 0005 F-7D - Derivatives Fugitives

- Agitators in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as specified in 40 CFR 63.1021(b), 63.1036, 63.1037, or 63.1028(e). If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1028(d). Subpart UU. [40 CFR 63.1028(c)(1)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service: Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Subpart UU. [40 CFR 63.1028(c)(3)]
- Agitators in gas/vapor service and light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal, follow the procedures specified in 40 CFR 63.1028(c)(3)(i)(A) or (c)(3)(ii)(B) prior to the next required inspection. Subpart UU. [40 CFR 63.1028(c)(3)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times (except during periods of startup, shutdown, or malfunction) greater than the agitator stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(ii)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(ii)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(ii)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal, follow the procedures specified in 40 CFR 63.1028(c)(1)(iv)(A) or (e)(1)(iv)(B) prior to the next required inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(iv)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system - sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator seal is located within the boundary of an unmanned plant site. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(v)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both and applicable to the presence and frequency of drips. If indications of liquids dripping from the agitator seal exceed the criteria, or if, based on the criteria the sensor indicates a failure of the seal system, the barrier fluid system, or both, a leak is detected. If a leak is detected, repair pursuant to 40 CFR 63.1024, as applicable. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(vi)(A)]

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- 537 [40 CFR 63.1028(e)(1)(vi)(B)] Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(vi)(B)]
- 538 [40 CFR 63.1028(e)(4)] Agitators in gas/vapor service and light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement in lieu of the weekly, visual inspection requirements of 40 CFR 63.1028(c)(3) and (e)(1)(iv) and the daily requirements of 40 CFR 63.1028(e)(1)(v). Subpart UU. [40 CFR 63.1028(e)(4)]
- 539 [40 CFR 63.1028(e)(5)] Which Months: All Year Statistical Basis: None specified Agitators in gas/vapor service and light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor at least once per calendar year. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(5)]
- 540 [40 CFR 63.1028(e)(7)] Which Months: All Year Statistical Basis: None specified Agitators in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(7)]
- 541 [40 CFR 63.1029(b)] Which Months: All Year Statistical Basis: None specified Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method, unless the potential leak is repaired as required in 40 CFR 63.1029(c). If an instrument reading of 10,000 ppm or greater (agitators), 5,000 ppm or greater (pumps handling polymerizing monomers), 2,000 ppm or greater (pumps in food and medical service, and all other pumps), or 500 ppm or greater (valves, connectors, instrumentation systems, and pressure relief devices) is measured, a leak is detected. If a leak is detected, repair pursuant to 40 CFR 63.1024, as applicable. Subpart UU. [40 CFR 63.1029(b)]
- 542 [40 CFR 63.1030(b)] Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service: Organic HAP < 500 ppm except during pressure releases as provided for in 40 CFR 63.1030(c), or as otherwise specified in 40 CFR 63.1036, 63.1037, or 63.1039(d) or (e). Subpart UU. [40 CFR 63.1030(b)]
- 543 [40 CFR 63.1030(c)(1)] Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.1024(d). Subpart UU. [40 CFR 63.1030(c)(1)]
- 544 [40 CFR 63.1030(c)(2)] Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after a pressure release to confirm the condition indicated by an instrument reading of less than 500 ppm above background. Subpart UU. [40 CFR 63.1030(c)(2)]

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- 545 [40 CFR 63.1030(c)(3)]
Pressure relief devices in gas/vapor service: Monitoring data recordkeeping by electronic or hard copy within 5 days (calendar) after a pressure release. Record the dates and results of the monitoring required by 40 CFR 63.1030(c)(2) following a pressure release including the background level measured and the maximum instrument reading measured during the monitoring. Subpart UU. [40 CFR 63.1030(c)(3)]
- 546 [40 CFR 63.1030(e)]
Pressure relief devices in gas/vapor service (rupture disk): Install a replacement rupture disk upstream of the pressure relief device as soon as practical after each pressure release but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.1024(d). Comply with this requirement in lieu of the requirements in 40 CFR 63.1030(b) and (c). Subpart UU. [40 CFR 63.1030(e)]
- 547 [40 CFR 63.1031(b)]
Compressors (seal system): Operate with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times (except during periods of startup, shutdown, or malfunction); or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart UU. [40 CFR 63.1031(b)]
- 548 [40 CFR 63.1031(b)]
Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 63.1031(e) and (f). Subpart UU. [40 CFR 63.1031(b)]
- 549 [40 CFR 63.1031(c)]
Compressors: Ensure that the barrier fluid is not in liquid service. Subpart UU. [40 CFR 63.1031(c)]
- 550 [40 CFR 63.1031(c)]
Compressors (sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an alarm unless the compressor is located within the boundary of an unmanned plant site. Subpart UU. [40 CFR 63.1031(c)]
- 551 [40 CFR 63.1031(c)]
Which Months: All Year Statistical Basis: None specified
Compressors: Equip each barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart UU. [40 CFR 63.1031(c)]
- 552 [40 CFR 63.1031(d)(1)]
Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024; as applicable. Subpart UU. [40 CFR 63.1031(d)(1)]
- 553 [40 CFR 63.1031(d)(2)]
Compressors: Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Subpart UU. [40 CFR 63.1031(d)(2)]
- 554 [40 CFR 63.1031(e)]
Compressors (routed to a process or fuel gas system or equipped with a closed-vent system): Equip with a system to capture and transport leakage from the compressor drive shaft seal to a process or a fuel gas system or to a closed-vent system that captures and transports leakage from the compressor to a control device meeting the requirements of either 40 CFR 63.1034 or 63.1021(b). Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(f) through (d). Subpart UU. [40 CFR 63.1031(f)(1)]
- 555 [40 CFR 63.1031(f)(1)]
Compressors (operating with instrument reading of less than 500 ppm above background): Organic HAP < 500 ppm above background at all times, as demonstrated initially upon designation, annually, and at other times requested by DEQ. Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(f)(2)]
- 556 [40 CFR 63.1031(f)(2)]
Which Months: All Year Statistical Basis: None specified
Compressors (operating with instrument reading of less than 500 ppm above background): Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of a compliance test. Record the dates and results of each compliance test including the background level measured and the maximum instrument reading measured during each compliance test. Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(f)(2)]

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- Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, or 63.1032(d). Operate the system as specified in 40 CFR 63.1032(c)(1) through (c)(5). Subpart UU.
- Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 63.1033(c) and (d). Ensure that the cap, blind flange, plug, or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart UU. [40 CFR 63.1033(b)]
- Submit Initial Compliance Status Report: Due according to the procedures in the referencing subpart. Include the information listed in 40 CFR 63.1039(a)(1) through (a)(3), as applicable. Subpart UU. [40 CFR 63.1039(a)]
- Submit Periodic Reports: Due according to the procedures in the referencing subpart. Include the information listed in 40 CFR 63.1039(b)(1) through (b)(8), as applicable. Subpart UU. [40 CFR 63.1039(b)]
- Comply with the requirements in 40 CFR 63. Subpart UU and the requirements referenced therein. Subpart FFFF. [40 CFR 63.2480(a)]
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.2525(a) through (k), as applicable. Subpart FFFF.
- Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.
- State Only - The number of each type of component required to be monitored for each monitoring period under applicable leak detection and repair programs shall be reported to the LDEQ by inclusion with each periodic monitoring report. Fugitive emission piping components may be added to or removed from the permitted units, without triggering the need to apply for a permit modification provided:

- a. Changes in components involve routine maintenance or are undertaken to address safety concerns, or involve small piping revisions with no associated emissions increase except from the fugitive emissions components themselves;
 - b. The changes do not involve any associated increases in production rate or capacity, or tie in of new or modified process equipment other than the piping components;
 - c. Actual emissions following the changes will not exceed the emission limits contained in this permit; and
 - d. The components are promptly incorporated into any applicable LDAR program.
- Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

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565 [LAC 33.III.5109.A]

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- Unsafe- and difficult-to-monitor equipment: Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Record the identity of equipment designated as unsafe-to-monitor according to the provisions of 40 CFR 63.1022(c)(1) and the planned schedule for monitoring this equipment. Also record the identity of equipment designated as difficult-to-monitor according to the provisions of 40 CFR 63.1022(c)(2), the planned schedule for monitoring this equipment, and an explanation why the equipment is unsafe or difficult-to-monitor. Keep this record at the plant and make available for review by an inspector. Subpart UU. [40 CFR 63.1022(c)(3)]
- Unsafe-to-monitor equipment: Have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2) for valves, 40 CFR 63.1026(b) and the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (viii) for pumps, 40 CFR 63.1027(a) and (b) for connectors, and 40 CFR 63.1028(c) for agitators. Subpart UU. [40 CFR 63.1022(c)(4)(i)]
- Difficult-to-monitor equipment: Have a written plan that requires monitoring of the equipment at least once per calendar year and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) for valves, and 40 CFR 63.1028(c) for agitators. Subpart UU. [40 CFR 63.1022(c)(4)(ii)]
- Connectors (unsafe-to-repair): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Record the identity of connectors designated as unsafe-to-repair and an explanation of why the connectors are unsafe-to-repair. Subpart UU. [40 CFR 63.1022(d)(2)]
- Equipment in heavy liquid service: Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service; or, when requested by DEQ, demonstrate that the piece of equipment or process is in heavy liquid service. Subpart UU. [40 CFR 63.1022(f)]
- Identify equipment subject to 40 CFR 63. Subpart UU as specified in 40 CFR 63.1022(a) through (f), as applicable. Subpart UU.
- Attach a weatherproof and readily visible identification to leaking equipment, when a leak is detected pursuant to the monitoring specified in 40 CFR 63.1023(a). Subpart UU. [40 CFR 63.1023(e)(1)]
- Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of a leak. Record the information specified in 40 CFR 63.1024(f) when a leak is detected. Keep the records pursuant to the referencing subpart, except keep information for connectors complying with the 8 year monitoring period allowed under 40 CFR 63.1027(b)(3)(iii) for 5 years beyond the date of its last use. Subpart UU. [40 CFR 63.1023(e)(2)]
- Repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as specified in 40 CFR 63.1024(d) and (e). Make a first attempt at repair no later than 5 calendar days after the leak is detected. Subpart UU. [40 CFR 63.1024(a)]
- Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of delay of repair of a leak. Maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. Subpart UU. [40 CFR 63.1024(d)]
- Valves in gas/vapor service and light liquid service (the greater of 2 valves or 2% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Subpart UU. [40 CFR 63.1025(b)(3)(i)]
- Which Months: All Year Statistical Basis: None specified

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- 577 [40 CFR 63.1025(b)(3)(ii)] Valves in gas/vapor service and light liquid service (less than the greater of 2 valves or 2% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks, except as specified in 40 CFR 63.1025(b)(3)(iii) through (b)(3)(v). If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Subpart UU. [40 CFR 63.1025(b)(3)(ii)]
- 578 [40 CFR 63.1025(b)(3)(iv)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (less than 1% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 semiannually to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(iv)]
- 579 [40 CFR 63.1025(b)(3)(v)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(v)]
- 580 [40 CFR 63.1025(b)(3)(v)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (less than 0.25% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1025(d). Alternative to quarterly monitoring in 40 CFR 63.1025(b)(3)(ii). Subpart UU. [40 CFR 63.1025(b)(3)(v)]
- 581 [40 CFR 63.1025(b)(3)(vi)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep a record of the monitoring schedule for each process unit. Subpart UU. [40 CFR 63.1025(b)(3)(vi)]
- 582 [40 CFR 63.1025(c)(1)(ii)] Valves in gas/vapor service and light liquid service: Calculate the percent leaking valves for each monitoring period for each process unit or valve subgroup using the equation in 40 CFR 63.1025(c)(1)(ii). Subpart UU. [40 CFR 63.1025(c)(1)(ii)]
- 583 [40 CFR 63.1025(d)(2)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within three months after repair of a leak to determine whether the valve has resumed leaking. Subpart UU. [40 CFR 63.1025(d)(2)]
- 584 [40 CFR 63.1025(e)(1)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (unsafe-to-monitor): Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the regulation's specified frequency to detect leaks. Monitor at least once per calendar year. If a leak is detected, a leak is recorded. If a leak is detected, periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b) and (d)(2). Subpart UU. [40 CFR 63.1025(e)(1)]
- 585 [40 CFR 63.1025(e)(2)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service and light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually to detect leaks. Monitor at least once per calendar year. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1025(b). Subpart UU. [40 CFR 63.1025(e)(2)]
- Which Months: All Year Statistical Basis: None specified

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586 [40 CFR 63.1025(e)(3)]

Valves in gas/vapor service and light liquid service (fewer than 250 valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly to detect leaks. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the monthly monitoring specified in 40 CFR 63.1025(b)(3)(i). Subpart UU. [40 CFR 63.1025(e)(3)]

Which Months: All Year Statistical Basis: None specified

Pumps in light liquid service: Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Subpart UU. [40 CFR 63.1026(b)(4)]

Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, follow the procedure specified in 40 CFR 63.1026(b)(4) or (b)(4)(ii). Subpart UU. [40 CFR 63.1026(b)(4)]

Which Months: All Year Statistical Basis: None specified

Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks. If a reading of 5,000 ppm (pumps handling polymerizing monomers), 2,000 ppm (pumps in food/medical service), or 1,000 ppm (all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1026(d). Initiate repairs for pumps with a 1,000 ppm leak definition only when an instrument reading of 2,000 ppm or greater is detected. Subpart UU. [40 CFR 63.1026(b)]

Which Months: All Year Statistical Basis: None specified

Pumps in light liquid service: Implement a quality improvement program that complies with 40 CFR 63.1035 if, when calculated on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart UU. [40 CFR 63.1026(c)(2)]

Pumps in light liquid service: Determine percent leaking pumps using the equation specified in 40 CFR 63.1026(c)(4). Subpart UU. [40 CFR 63.1026(c)(4)]

Pumps in light liquid service (dual mechanical seal system): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records at the plant of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Make records available for review by an inspector. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(i)]

Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(i)]

Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times (except periods of startup, shutdown, or malfunction) greater than the pump stuffing box pressure, or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(ii)]

593 [40 CFR 63.1026(e)(1)(i)]
592 [40 CFR 63.1026(e)(1)(ii)]

594 [40 CFR 63.1026(e)(1)(iii)]

Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU. [40 CFR 63.1026(e)(1)(iii)]

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596	[40 CFR 63.1026(e)(1)(iv)]	Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, the barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU [40 CFR 63.1026(e)(1)(iv)]
597	[40 CFR 63.1026(e)(1)(v)]	Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal, follow the procedure specified in 40 CFR 63.1026(e)(1)(v)(A) or (e)(1)(v)(B) prior to the next required inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU [40 CFR 63.1026(e)(1)(v)]
598	[40 CFR 63.1026(e)(1)(vi)]	Which Months: All Year Statistical Basis: None specified Pumps in light liquid service (dual mechanical seal system): Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU [40 CFR 63.1026(e)(1)(vi)]
599	[40 CFR 63.1026(e)(1)(vii)]	Pumps in light liquid service (dual mechanical seal system - sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1026(b). Subpart UU [40 CFR 63.1026(e)(1)(vii)]
600	[40 CFR 63.1026(e)(6)]	Which Months: All Year Statistical Basis: None specified Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 5,000 ppm (pumps handling polymerizing monomers), 2,000 ppm (pumps in food/meat service), or 1,000 ppm (all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements of 40 CFR 63.1026(b) and the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (viii). Subpart UU [40 CFR 63.1026(e)(6)]
601	[40 CFR 63.1027(a)]	Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor all connectors in each process unit initially for leaks by the later of either 12 months after the compliance date as specified in a referencing subpart or 12 months after initial startup. If an instrument reading of 500 ppm or greater is measured, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU [40 CFR 63.1027(a)]
602	[40 CFR 63.1027(b)(3)(i)]	Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service (0.5% or greater leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor within 12 months after the initial monitoring specified in 40 CFR 63.1027(a). If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU [40 CFR 63.1027(b)(3)(i)]

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- 603 [40 CFR 63.1027(b)(3)(ii)] Connectors in gas/vapor service and light liquid service (greater than or equal to 0.25% but less than 0.5% leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor within 4 years after the initial monitoring specified in 40 CFR 63.1027(a). If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(b)(3)(ii)]
- 604 [40 CFR 63.1027(b)(3)(iii)] Connectors in gas/vapor service and light liquid service (less than 0.25% leaking connectors): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Monitor connectors as specified in 40 CFR 63.1027(b)(3)(iii)(A) and either (b)(3)(iii)(B) or (b)(3)(iii)(C), as appropriate. If a reading of 500 ppm is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1027(d). Subpart UU. [40 CFR 63.1027(b)(3)(iii)]
- 605 [40 CFR 63.1027(b)(3)(iv)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 90 days after repair of a connector that is found to be leaking during the monitoring conducted pursuant to 40 CFR 63.1027(b)(3)(i) through (b)(3)(iii), to confirm that it is not leaking. Subpart UU. [40 CFR 63.1027(b)(3)(iv)]
- 606 [40 CFR 63.1027(b)(3)(v)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service: Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep a record of the start date and end date of each monitoring period under 40 CFR 63.1027 for each process unit. Subpart UU. [40 CFR 63.1027(b)(3)(v)]
- 607 [40 CFR 63.1027(c)] Connectors in gas/vapor service and light liquid service: Calculate percent leaking connectors using the equation in 40 CFR 63.1027(c). Subpart UU. [40 CFR 63.1027(c)]
- 608 [40 CFR 63.1027(e)(1)] Connectors in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1027(a) and (b). Subpart UU. [40 CFR 63.1027(e)(1)]
- 609 [40 CFR 63.1027(e)(2)(ii)] Which Months: All Year Statistical Basis: None specified Connectors in gas/vapor service and light liquid service (inaccessible, ceramic, or ceramic-lined): Eliminate the visual, audible, olfactory, or other indications of a leak to the atmosphere as soon as practical, if connector is observed by visual, audible, olfactory, or other means to be leaking. Comply with this requirement in lieu of the monitoring requirements of 40 CFR 63.1027(a) and (b), and the recordkeeping and reporting requirements of 63.1038 and 63.1039. Subpart UU. [40 CFR 63.1027(e)(2)(ii)]
- 610 [40 CFR 63.1028(c)(1)] Agitators in gas/vapor service and light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as specified in 40 CFR 63.1021(b), 63.1036, 63.1037, or 63.1028(e). If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1028(d). Subpart UU. [40 CFR 63.1028(c)(1)]
- 611 [40 CFR 63.1028(c)(3)] Which Months: All Year Statistical Basis: None specified Agitators in gas/vapor service and light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal, follow the procedures specified in 40 CFR 63.1028(c)(3)(ii)(A) or (c)(3)(ii)(B) prior to the next required inspection. Subpart UU. [40 CFR 63.1028(c)(3)]

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- Agitators in gas/vapor service and light liquid service: Inspection records recordkeeping by electronic or hard copy weekly. Document that the leak inspection was conducted and the date of the inspection. Subpart UU. [40 CFR 63.1028(c)(3)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times (except during periods of startup, shutdown, or malfunction) greater than the agitator stuffing box pressure, or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(i)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(ii)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(iii)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal, follow the procedures specified in 40 CFR 63.1028(e)(1)(iv)(A) or (e)(1)(iv)(B) prior to the next required inspection. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(iv)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system - sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator seal is located within the boundary of an unmanned plant site. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(v)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both and applicable to the presence and frequency of drips. If indications of liquids dripping from the agitator seal exceed the criteria, or if, based on the criteria the sensor indicates a failure of the seal system, the barrier fluid system, or both; a leak is detected. If a leak is detected, repair pursuant to 40 CFR 63.1024, as applicable. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(vi)(A)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(1)(vi)(B)]
- Agitators in gas/vapor service and light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement in lieu of the weekly visual inspection requirements of 40 CFR 63.1028(c)(3) and (e)(1)(iv) and the daily requirements of 40 CFR 63.1028(e)(1)(v).
- Subpart UU. [40 CFR 63.1028(e)(4)]
- Which Months: All Year Statistical Basis: None specified

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621 [40 CFR 63.1028(e)(5)]

Agitators in gas/vapor service and light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor at least once per calendar year. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(5)]

622 [40 CFR 63.1028(e)(7)]

Agitators in gas/vapor service and light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency to detect leaks. Monitor as frequently as practical during state-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. If a reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024. Comply with this requirement in lieu of the requirements in 40 CFR 63.1028(c). Subpart UU. [40 CFR 63.1028(e)(7)]

623 [40 CFR 63.1029(b)]

Which Months: All Year Statistical Basis: None specified Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method, unless the potential leak is repaired as required in 40 CFR 63.1029(c). If an instrument reading of 10,000 ppm or greater (agitators), 5,000 ppm or greater (pumps handling polymerizing monomers), 2,000 ppm or greater (pumps in food and medical service, and all other pumps), or 500 ppm or greater (valves, connectors, instrumentation systems, and pressure relief devices) is measured, a leak is detected. If a leak is detected, repair pursuant to 40 CFR 63.1024, as applicable. Subpart UU. [40 CFR 63.1029(b)]

624 [40 CFR 63.1030(b)]

Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service: Organic HAP < 500 ppm except during pressure releases as provided for in 40 CFR 63.1030(c), or as otherwise specified in 40 CFR 63.1036, 63.1037, or 63.1030(d) or (e). Subpart UU. [40 CFR 63.1030(b)]

625 [40 CFR 63.1030(c)(1)]

Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.1024(d). Subpart UU. [40 CFR 63.1030(c)(1)]

626 [40 CFR 63.1030(c)(2)]

Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after a pressure release to confirm the condition indicated by an instrument reading of less than 500 ppm above background. Subpart UU. [40 CFR 63.1030(c)(2)]

627 [40 CFR 63.1030(c)(3)]

Which Months: All Year Statistical Basis: None specified Pressure relief devices in gas/vapor service: Monitoring data recordkeeping by electronic or hard copy within 5 days (calendar) after a pressure release. Record the dates and results of the monitoring required by 40 CFR 63.1030(c)(2) following a pressure release including the background level measured and the maximum instrument reading measured during the monitoring. Subpart UU. [40 CFR 63.1030(c)(3)]

628 [40 CFR 63.1030(e)]

Pressure relief devices in gas/vapor service (rupture disk): Install a replacement rupture disk upstream of the pressure relief device as soon as practical after each pressure release but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.1024(d). Comply with this requirement in lieu of the requirements in 40 CFR 63.1030(b) and (c). Subpart UU. [40 CFR 63.1030(e)]

629 [40 CFR 63.1031(b)]

Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 63.1031(e) and (f). Subpart UU. [40 CFR 63.1031(b)]

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- 630 [40 CFR 63.1031(b)] Compressors (seal system): Operate with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times (except during periods of startup, shutdown, or malfunction); or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 40 CFR 63.1034 or 63.1021(b); or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart UU. [40 CFR 63.1031(b)]
- Compressors (sensor): Presence of a leak monitored by visual inspection/determination daily, or equip with an alarm unless the compressor is located within the boundary of an unmanned plant site. Subpart UU. [40 CFR 63.1031(c)]
- Which Months: All Year Statistical Basis: None specified
- Compressors: Equip each barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart UU. [40 CFR 63.1031(c)]
- Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart UU. [40 CFR 63.1031(c)]
- Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1024, as applicable. Subpart UU. [40 CFR 63.1031(d)(1)]
- Compressors: Equipment/operational data recordkeeping by electronic or hard copy once initially and upon change or revision. Keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. Subpart UU. [40 CFR 63.1031(d)(2)]
- Compressors (routed to a process or fuel gas system or equipped with a closed-vent system): Equip with a system to capture and transport leakage from the compressor drive shaft seal to a process or a fuel gas system or to a closed-vent system that captures and transports leakage from the compressor to a control device meeting the requirements of either 40 CFR 63.1034 or 63.1021(b). Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(e)]
- Compressors (operating with instrument reading of less than 500 ppm above background): Organic HAP < 500 ppm above background at all times, as demonstrated initially upon designation, annually, and at other times requested by DEQ. Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(f)(1)]
- Which Months: All Year Statistical Basis: None specified
- Compressors (operating with instrument reading of less than 500 ppm above background): Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of a compliance test. Record the dates and results of each compliance test including the background level measured and the maximum instrument reading measured during each compliance test. Comply with this requirement in lieu of the requirements in 40 CFR 63.1031(b) through (d). Subpart UU. [40 CFR 63.1031(f)(2)]
- Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, or 63.1032(d). Operate the system as specified in 40 CFR 63.1032(c)(1) through (c)(5). Subpart UU.
- Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.1021(b), 63.1036, 63.1037, and 63.1033(c) and (d). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart UU. [40 CFR 63.1033(b)]
- Submit Initial Compliance Status Report: Due according to the procedures in the referencing subpart. Include the information listed in 40 CFR 63.1039(a)(1) through (a)(3), as applicable. Subpart UU. [40 CFR 63.1039(a)]

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- 642 [40 CFR 63.1039(b)]
643 [40 CFR 63.2480(a)]
644 [40 CFR 63.2525]
645 [LAC 33:III.2111]
646 [LAC 33:III.501.C.6]

Submit Periodic Reports: Due according to the procedures in the referencing subpart. Include the information listed in 40 CFR 63.1039(b)(1) through (b)(8), as applicable. Subpart UU. [40 CFR 63.1039(b)] Comply with the requirements in 40 CFR 63 Subpart UU and the requirements referenced therein. Subpart FFFF. [40 CFR 63.2480(a)] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.2525(a) through (k), as applicable. Subpart FFFF. Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.

State Only - The number of each type of component required to be monitored for each monitoring period under applicable leak detection and repair programs shall be reported to the LDEQ by inclusion with each periodic monitoring report. Fugitive emission piping components may be added to or removed from the permitted units, without triggering the need to apply for a permit modification provided:

- a. Changes in components involve routine maintenance or are undertaken to address safety concerns, or involve small piping revisions with no associated emissions increase except from the fugitive emissions components themselves;
- b. The changes do not involve any associated increases in production rate or capacity, or tie in of new or modified process equipment other than the piping components;
- c. Actual emissions following the changes will not exceed the emission limits contained in this permit; and
- d. The components are promptly incorporated into any applicable LDAR program.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

GRP 0025 CAP-L1 - Loading Emissions CAP

Group Members: EQT 0216EQT 0219EQT 0220EQT 0221

- 648 [LAC 33:III.501.C.6]
649 [LAC 33:III.501.C.6]
650 [LAC 33:III.501.C.6]

Equipment/operational data monitored by technically sound method continuously.
Which Months: All Year Statistical Basis: None specified
Equipment/operational data recordkeeping by electronic or hard copy monthly. Keep records of the total throughput of the loading operations, Emission Point Nos. RL-01, WL-01, XK-01, and XK-02, each month, as well as the total throughput of the loading operations for the last twelve months. Make records available for inspection by DEQ personnel.
Submit report: Due annually, by the 31st of March. Report the throughput of the loading operations, Emission Point Nos. RL-01, WL-01, XK-01, and XK-02, for the preceding calendar year to the Office of Environmental Compliance, Enforcement Division.

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651 [LAC 33.111.501.C.6]

Equipment/operational data <= 129.24 MM lbs/yr. Noncompliance with this limitation is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division if throughput of the loading operations, Emission Point Nos. RL-01, WL-01, XK-01, and XK-02, exceeds the maximum listed in this specific condition for any twelve consecutive month period.
Which Months: All Year Statistical Basis: None specified

RLP 0004 UF-06 - Deaerator Vent

652 [40 CFR 63.2455]

40 CFR 63 Subpart FFFF. Group 2 process vent with TRE index >5.0 shall maintain TRE index >5.0, comply with provisions of calculation of TRE index in 63.115(d), as well as, the recordkeeping and reporting provisions in 63.2525. Process vent meets the criteria of a Group 2 Continuous Process Vent.

TRE index value recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain records of measurements, engineering assessments, and calculations performed to determine TRE. Maintain up-to-date readily accessible records of process changes or any TRE recalculation. [40 CFR 63.2525(a)]
Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Class III TAPs emitted only; must meet ambient air standards; No MACT requirements apply.

UNF 0002 NPD - Nitroparaffins Derivatives Plant and Related Units

655 [40 CFR 60.]

656 [40 CFR 61.355]

657 [40 CFR 61.356]

658 [40 CFR 61.357(b)]

659 [40 CFR 61.]

660 [40 CFR 63.2343(a)]

661 [40 CFR 63.2343(a)]

All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.

Determine compliance with 40 CFR 61 Subpart FF using the test methods and procedures specified in 40 CFR 61.355(a) through (i), as applicable. Subpart FF.

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 61.356(a) through (n), as applicable. Maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified. Subpart FF.

Submit report: Due whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more. Submit updates to the information listed in 40 CFR 61.357(a)(1) through (a)(3). Subpart FF [40 CFR 61.357(b)]

All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A.

Comply with all applicable provisions of 40 CFR 63 Subpart EEEE (Organic Liquids Distribution NESHAP). The unloading of organic liquids at the Nitroparaffins Derivatives Plant (NPD) and Related Units will be part of the Organic Liquids Distribution NESHAP affected source because it meets the definition of a transfer rack under the OLD NESHAP and the MON does not regulate unloading operations. All other operations associated with the NPD and Related Units are subject to 40 CFR 63 Subpart FFFF (MON). [40 CFR 63.2343(a)]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. For transfer racks that only unload organic liquids - keep records that verifies that the transfer rack is not required to be controlled. Note: Emissions from unloading activities will be emitted from the vessel the liquid is being loaded into. There are no direct emissions associated with the unloading activities. [40 CFR 63.2343(a)]

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UNF 0002 NPD - Nitroparaffins Derivatives Plant and Related Units

- Comply with all applicable requirements of 40 CFR 63 Subpart FFFF (Miscellaneous Organic NESHAP).
- 662 [40 CFR 63.243(j)] Comply with all applicable requirements of 40 CFR 63 Subpart FFFF Tables 1 through 7 at all times, except during periods of startup, shutdown, and malfunction. Subpart FFFF. [40 CFR 63.2450(a)]
- 663 [40 CFR 63.2450(q)] Be in compliance with the emission limits and work practice standards in 40 CFR 63 Subpart FFFF Tables 1 through 7 at all times, except during periods of startup, shutdown, and malfunction. Subpart FFFF. [40 CFR 63.2450(a)]
- 664 [40 CFR 63.2450(q)] Submit documentation in the precompliance report explaining why an undue safety hazard would be created if the air emission controls were installed, and describe the procedures that will be implemented to minimize HAP emissions from these vent streams, if an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in 40 CFR 63 Subpart FFFF.
- Tables 1 through 7. Subpart FFFF. [40 CFR 63.2450(q)]
- 665 [40 CFR 63.2515(a)] Submit all of the notifications in 40 CFR 63.6(b)(4) and (h)(5), 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b) through (h) by the dates specified, as applicable. Subpart FFFF. [40 CFR 63.2515(a)]
- 666 [40 CFR 63.2515(c)] Submit notification of intent to conduct a performance test: Due at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1), if required to conduct a performance test. Subpart FFFF. [40 CFR 63.2515(c)]
- 667 [40 CFR 63.2520(a)] Submit Compliance Report: Due semiannually by August 31 and February 28. Include the information specified in 40 CFR 63.2520(e)(1) through (e)(10). Subpart FFFF. [40 CFR 63.2520(a)]
- 668 [40 CFR 63.2520(a)] Submit Precompliance Report: Due at least six months prior to the compliance date. Include the information specified in 40 CFR 63.2520(c)(1) through (c)(7), as applicable. Subpart FFFF. [40 CFR 63.2520(a)]
- 669 [40 CFR 63.2520(a)] Submit Notification of Compliance Status Report: Due no later than 150 days after the compliance date specified in 40 CFR 63.2445. Include the information specified in 40 CFR 63.2520(d)(2)(i) through (d)(2)(ix). Subpart FFFF. [40 CFR 63.2520(a)]
- 670 [40 CFR 63.2525] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.2525(a) through (k), as applicable. Subpart FFFF.
- All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A as delineated in Table 12 of 40 CFR 63 Subpart FFFF. Equipment/operational data recordkeeping by electronic or hard copy continuously: Document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 68.22. [40 CFR 68.12(b)(1)]
- 671 [40 CFR 63.] Complete the five-year accident history for the process as provided in 68.42. [40 CFR 68.12(b)(2)]
- 672 [40 CFR 68.12(b)(1)] Ensure that response actions have been coordinated with local emergency planning and response agencies. [40 CFR 68.12(b)(3)]
- 673 [40 CFR 68.12(b)(2)] Include in the RMP the certification specified in 68.12(b)(4). [40 CFR 68.12(b)(4)]
- 674 [40 CFR 68.12(b)(3)] Submit Risk Management Plan (RMP): Due no later than June 21, 1999, or three years after the date on which a regulated substance is first listed under 68.130, or the date on which a regulated substance is first present above a threshold quantity in a process. Submit in a method and format to a central point as specified by EPA prior to June 21, 1999.
- 675 [40 CFR 68.12(b)(4)] Provide in the RMP an executive summary that includes a brief description of the elements listed in 68.155(a) through (g).
- 676 [40 CFR 68.150] Complete a single registration form and include in the RMP. Cover all regulated substances handled in covered processes. Include in the registration the information specified in 68.160(b)(1) through (13).
- 677 [40 CFR 68.155] Submit in the RMP information one worst-case release scenario for each Program 1 process. Include the data specified in 68.165(b)(1) through (13).
- 678 [40 CFR 68.160] Submit in the RMP the information provided in 68.42(b) on each accident covered by 68.42(a).
- 679 [40 CFR 68.165]
- 680 [40 CFR 68.168]

SPECIFIC REQUIREMENTS

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- Provide in the RMP the emergency response information listed in 68.180(a) through (c).
Submit revised registration to EPA: Due within six months after a stationary source is no longer subject to 40 CFR 68. Indicate that the stationary source is no longer covered. [40 CFR 68.190(c)]
- Review and update the RMP as specified in 68.190(b) and submit it in a method and format to a central point specified by EPA prior to June 21, 1999.
- Maintain records supporting the implementation of 40 CFR 68 for five years unless otherwise provided.
Use the endpoints specified in 68.22(a) through (g) for analyses of offsite consequences.
Analyze the release scenarios in 68.25, as specified in 68.25(a) through (h).
- Identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes, as specified in 68.28(b) through (e).
Estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a).
List in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a).
- Submit revised RMP: Due within six months after changes in processes, quantities stored or handled, or any other aspect of the stationary source increase or decrease the distance to the endpoint by a factor of two or more. [40 CFR 68.36(b)]
- Review and update the offsite consequence analyses at least once every five years. Complete a revised analysis within six months if changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more.
- Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain the records specified in 68.39(a) through (e) on the offsite consequence analyses.
Include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. Include the information specified in 68.42(b)(1) through (10) for each accidental release.
- Submit Title V permit application for renewal: Due 6 months before permit expiration date. [40 CFR 70.5(a)(1)(iii)]
- Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
- 681 [40 CFR 68.180]
682 [40 CFR 68.190(c)]
683 [40 CFR 68.190]
684 [40 CFR 68.200]
685 [40 CFR 68.22]
686 [40 CFR 68.25]
687 [40 CFR 68.28]
688 [40 CFR 68.30]
689 [40 CFR 68.33]
690 [40 CFR 68.36(b)]
691 [40 CFR 68.36]
692 [40 CFR 68.39]
693 [40 CFR 68.42]
694 [40 CFR 70.5(a)(1)(iii)]
695 [40 CFR 70.6(a)(3)(iii)(A)]

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UNF 0002 NPD - Nitroparaffins Derivatives Plant and Related Units

- Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. [40 CFR 70.6(a)(3)(iii)(B)]
- Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]
- Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
- Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.
- Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.
- Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited.
- If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G.
- Hydrogen <= 48.69 tons/yr.
- Which Months: All Year. Statistical Basis: Annual maximum
- Do not construct or modify any stationary source subject to any standard set forth in LAC 33:III.Chapter 51.Subchapter A without first obtaining written authorization from DEQ in accordance with LAC 33:III.Chapter 51.Subchapter A, after the effective date of the standard.
- Do not cause a violation of any ambient air standard listed in LAC 33:III.Table 51.2, unless operating in accordance with LAC 33:III.5109.B.
- Do not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard.
- Do not fail to keep records, notify, report or revise reports as required under LAC 33:III Chapter 51.Subchapter A.
- Include a certification statement with the annual emission report and revisions to any emission report that attests that the information contained in the emission report is true, accurate, and complete, and that is signed by a responsible official, as defined in LAC 33:III.502. Include the full name of the responsible official, title, signature, date of signature and phone number of the responsible official.

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UNF 0002 NPD - Nitroparaffins Derivatives Plant and Related Units

- Submit Annual Emissions Report: Due annually, by the 31st of March unless otherwise directed by DEQ, to the Office of Environmental Assessment in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3.
- Submit notification: Due to the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 immediately, but in no case later than 1 hour, after any discharge of a toxic air pollutant into the atmosphere that results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property).
- Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, no later than 24 hours after the beginning of any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:1.3931, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question. Submit notification in the manner provided in LAC 33:1.3923.
- Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, immediately, but in no case later than 24 hours after any unauthorized discharge of a toxic air pollutant into the atmosphere that does not cause an emergency condition, the rate or quantity of which is in excess of that allowed by permit, compliance schedule, or variance, or for upset events that exceed the reportable quantity in LAC 33:1.3931.
- Submit notification in the manner provided in LAC 33:1.3923.
- Submit written report: Due by certified mail to SPOC within seven calendar days of learning of any such discharge or equipment bypass as referred to in LAC 33:III.5107.B.1 through B.3. Include the information specified in LAC 33:III.5107.B.4.a.i through B.4.a.viii.
- Report all discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, IF THEY CAN BE MEASURED AND CAN BE RELIABLY QUANTIFIED . USING GOOD ENGINEERING PRACTICES, to DEQ along with the annual emissions report and where otherwise specified. Include the identity of the source, the date and time of the discharge, and the approximate total loss during the discharge.
- Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33:III Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ. Provide a copy of the SOP within 30 days upon request by DEQ.
- Submit notification in writing: Due to SPOC not more than 60 days nor less than 30 days prior to initial start-up. Submit the anticipated date of the initial start-up.
- Submit notification in writing: Due to SPOC within 10 working days after the actual date of initial start-up of the source. Submit the actual date of initial start-up of the source.
- Permittee shall comply with the Part 70 General Conditions as set forth in LAC 33:III.535 and the Louisiana General Conditions as set forth in LAC 33:III.537. [LAC 33:III.535, LAC 33:III.537]
- Activate the preplanned abatement strategy listed in LAC 33:III.5611. Table 5 when the administrative authority declares an Air Pollution Alert.
- Activate the preplanned strategy listed in LAC 33:III.5611. Table 6 when the administrative authority declares an Air Pollution Warning.

SPECIFIC REQUIREMENTS

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- Activate the preplanned abatement strategy listed in LAC 33:III.5611. Table 7 when the administrative authority declares an Air Pollution Emergency.
- Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency.
- Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611. Tables 5, 6, and 7.
- Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901.
- Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33:III.5907, or Table 59.1 of LAC 33:III.5913 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur.
- Submit registration: Due January 31, 1998, or within 60 days after the source becomes subject to LAC 33:III. Chapter 59, whichever is later.
- Include the information listed in LAC 33:III.5911.B, and submit to the Office of Environmental Compliance.
- Submit amended registration: Due to the Office of Environmental Compliance within 60 days after the information in the submitted registration is no longer accurate.
- Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment.
- Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
APPENDIX A
PART 70 SPECIFIC CONDITIONS

NITROPARAFFINS DERIVATIVES PLANT AND RELATED UNITS
AGENCY INTEREST NO.: 1556
ANGUS CHEMICAL COMPANY
STERLINGTON, OUACHITA PARISH, LOUISIANA

Permittee shall comply with a streamlined equipment leaks monitoring program. Compliance with the streamlined program in accordance with this specific condition shall serve to comply with each of the applicable fugitive emission monitoring programs being streamlined, as indicated in the following table. Noncompliance with the streamlined program in accordance with this specific condition may subject the permittee to enforcement action for one or more of the applicable fugitive emissions programs.

- a. Permittee shall apply the streamlined program to the combined universe of components subject to any of the programs being streamlined. Any component type which does not require periodic monitoring under the overall most stringent program shall be monitored as required by the most stringent requirements of any other program being streamlined and will not be exempted. The streamlined program will include any exemptions based on size of component available in any of the programs being streamlined.
- b. Permittee shall use leak definitions and monitoring frequency based on the overall most stringent program. Percent leaker performance shall be calculated using the provisions of the overall most stringent program. Annual monitoring shall be defined as once every four quarters. Some allowance may be made in the first year of the streamlined program in order to allow for transition from existing monitoring schedules.
- c. Permittee shall comply with recordkeeping and reporting requirements of the overall most stringent program. Semiannual reports shall be submitted on September 30 and March 31, to cover the periods January 1 through June 30 and July 1 through December 31, respectively. The semiannual reports shall include any monitoring performed within the reporting period.

Unit or Plant Site	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
NPD Plant Derivatives Fugitives - Formaldehyde (F-7)	40 CFR 63, Subpart UU by 40 CFR 63, Subpart FFFF Louisiana MACT Determination for Non-HON Sources	≥ 5% VHAP ≥ 5% VOTAP	40 CFR 63 Subpart UU